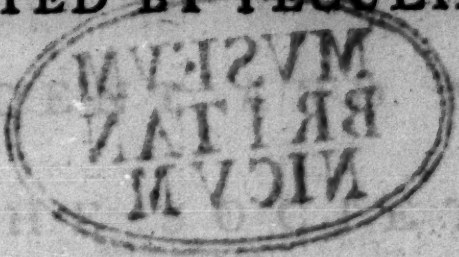


K. Steele (J)

B. J. L.

TO THE RIGHT HONOURABLE AND HONOURABLE
MEMBERS OF THE HOUSE OF COMMONS
AND OF THE HOUSE OF LORDS
IN PARLIAMENT ASSEMBLED
THE ROYAL SOCIETY
INSTITUTED FOR THE IMPROVEMENT OF
NATURAL KNOWLEDGE
AN ESSAY
TOWARDS ESTABLISHING THE MELODY AND
MEASURE OF SPEECH TO BE EXPRESSED AND
PERPETUATED BY PECULIAR SYMBOLS.



L O N D O N:

PRINTED BY W. BOWYER AND J. NICHOLS:

FOR J. ALMON, IN PICCADILLY.

MDCCLXXV.

20

AN ESSAY
TOWARDS ESTABLISHING THE MELODY AND
MEASURE OF SPEECH TO BE EXPRESSED AND
PERPETUATED BY SPECIAL SYMBOLS.



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PRINTED BY W. BOWYER AND J. NICHOLS:
FOR J. ALMON, IN PICCADILLY.
MDCCLXXV.

TO THE RIGHT HONOURABLE AND HONOURABLE
THE PRESIDENT AND FELLOWS OF
THE ROYAL SOCIETY,
INSTITUTED FOR THE IMPROVEMENT OF
NATURAL KNOWLEDGE;

AND

TO THE RIGHT HONOURABLE AND HONOURABLE
THE PRESIDENT AND MEMBERS OF
THE SOCIETY
FOR THE ENCOURAGEMENT OF ARTS,
THIS TREATISE

ON THE
MELODY AND MEASURE OF SPEECH

IS RESPECTFULLY INSCRIBED,

BY THEIR MOST HUMBLE SERVANT,

44
THE AUTHOR.

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think of letting it set out under my name alone, without some other of better authority to recommend it, I hope I may be indulged with the liberty of prefixing yours as its sponsor. I might say, as something more; **TO** as my love of science owes very much to the happiness I had of an early acquaintance with you, so if I had not been lately prompted by your spirit of

SIR JOHN PRINGLE, BART
the light at all.

PRESIDENT OF THE ROYAL SOCIETY.

SIR,

FINDING that, of this Child, which I have so long nourished in private, some imperfect rumours are spread abroad; and, exciting curiosity, have moved my friends and others to discourse variously about it; I have thought proper to let it go into the world, and speak for itself. And though it may appear awkward or deficient, for want of that farther education which I intended to have procured for it, under the advice of those learned persons, to whom I made it known last year; yet reflecting on the many advantages of a more public schooling, I am resolved to keep it at home no longer: however, as I cannot think

think of letting it set out under my name alone, without some other of better authority to recommend it, I hope I may be indulged with the liberty of prefixing yours as its sponsor. I might say, as something more; for, as my love of science owes very much to the happiness I had of an early acquaintance with you, so if I had not been lately prompted by your spirit of investigation, I think, this offspring of mine had never seen the light at all.

PRESIDENT OF THE ROYAL SOCIETY.

I am, SIR, with great regard,

Your most obedient humble servant,

FINDING that of this Child, which I have so long nourished in private, some imperfect rumours are spread abroad; and, exciting curiosity, have moved my friends and others to discourse variously about it; I have thought proper to let it appear into the world, and speak for itself. And though it may appear awkward or deficient, for want of that further education which I intended to have procured for it, under the advice of those learned persons, to whom I made it known last year; yet reflecting on the many advantages of a more public schooling, I am resolved to keep it at home no longer: however, as I cannot think

Margaret Street, Cavendish Square,
September 25, 1775.

JOSHUA STEELE.

P R E-

P R E F A C E.

THE following sheets, so far as the two first parts, were written as remarks on a few chapters of a late philosophical treatise, called *The Origin and Progress of Language*; and being communicated to the Author of that ingenious work, he was candid enough to give up many of the musical opinions which he had published in his first edition: opinions which he was led into by authors of great fame, as well as by practical musicians, whom he had consulted.

As, I believe, it seldom, or perhaps never, has happened, that the first knowledge or renovation of any art or science, came into the world compleatly systematized, I am more desirous of submitting my imperfect endeavours to the corrections of abler hands, than ambitious of praise for having produced a finished piece. And therefore, I have thought it best, on this occasion, to give the following matter nearly in its original form; selecting from the first edition of *The Origin and Progress*, those opinions, as a text, to which the remarks and conclusions, that made the subject of my two first letters, more immediately relate; the substance of which letters are contained in the two first parts. And next in order, the queries and doubts afterwards proposed by the ingenious author of *The Origin and Progress*, with my answers to them, make out the third and fourth parts and the postscript.

And

And probably, these altogether, though in this scattered manner (and incumbered with some repetitions) may be more clear and satisfactory to an inquiring reader, than if they were polished into a more formal system.

The puzzling obscurity relative to the *melody and measure* of speech, which has hitherto existed between modern critics and ancient grammarians, has been chiefly owing to a want of terms and characters, sufficient to distinguish clearly the several properties or accidents belonging to language; such as, *accent, emphasis, quantity, pause, and force*; instead of which *five terms*, they have generally made use of *two* only, *accent* and *quantity*, with some loose hints concerning *pauses*, but without any clear and sufficient rules for their use and admeasurement; so that the definitions required for distinguishing between the expression of *force* (or loudness) and *emphasis*, with their several degrees, were worse than lost; their difference being tacitly felt, though not explained or reduced to rule, was the cause of confounding all the rest.

In like manner, there still exists another defect in literal language of a similar kind; that is, there are in nature, neither more, nor less, than seven *vowel sounds*, besides diphthongs; for which seven sounds, the principal nations in Europe use only five characters (for the *y* has, with us, no sound distinct from the *i*), and this defect throws the orthography and pronunciation of the whole into uncertainty and confusion.

In order to distinguish what are *vowels* and what are not, let this be the definition of a *vowel sound*; *videlicet*, a simple sound capable of being continued invariably the same for a long time
(for

(for example, as long as the breath lasts), without any change of the organs; that is, without any movement of the throat, tongue, lips, or jaws.

But a *diphthong sound* is made by blending two *vowel sounds*, by a very quick pronunciation, into *one*.

So that to try, according to the foregoing definition, to continue a diphthong sound, the voice most commonly changes immediately from the first vowel sound, of which the diphthong is composed, by a small movement in some of the organs, to the sound of the vowel which makes the latter part of the said diphthong, the sound of the first vowel being heard only for one instant. For example, to make this experiment on the English sound of *u*, as in the word *use*, which is really a *diphthong* composed of these two English sounds *ee* and *oo*; the voice begins on the sound *ee*, but instantly dwindles into, and ends in, *oo*.

The other English sound of *u*, as in the words *ugly*, *undone*, *but*, and *cut*, is composed of the English sounds *au* and *oo*; but they require to be pronounced so extremely short and close together, that, in the endeavour to prolong the sound for this experiment, the voice will be in a continual confused struggle between the two component sounds, without making either of them, or any other sound, distinct; so that the true English sound of this diphthong can never be expressed but by the aid of a short energetic aspiration, something like a short cough, which makes it very difficult to our Southern neighbours in Europe.

To try the like experiment on the English sound of *i* or *y*, as *i* in the first person, and in the words *my*, *by*, *idle*, and

FINE, (both which letters are the marks of one and the same *diphthong sound* composed of the English sounds AU and EE,) the voice begins on the sound AU, and immediately changes to EE on which it continues and ends.

The English sound of **E**, in the words *met, let, men, get*, is a diphthong composed of the vocal sounds A and E (being the second and third vowels in the following arrangement) and pronounced very short.

In order the better to ascertain the tones of the seven vocal sounds, I have ventured to add a few French words in the exemplification; in the pronunciation of which, I hope, I am not mistaken. If I had not thought it absolutely necessary, I would not have presumed to meddle with any living language but my own; the candid reader will therefore forgive and correct my errors, if I have made any in this place, by substituting such other French syllables as will answer the end proposed.

The seven natural vowel sounds may be thus marked, and explained to sound,

in English as the words,

a=all, small, or, for, knock, lock, occur.

ā=man, can, cat, rat.

e=may, day, take, nation,

i=evil, keen, it, be, iniquity.

o=open, only, broke, hole.

u=fool, two, rule, tool, do.

u= { superfluous, tune, su- } very rare in
preme, credulity, } English.

in French as the words,

en, grande.

Paris, habit, pardon.

ses, et.

Paris, habit, ris, dit, il.

soldat, côtes, offrir.

ou, vous, jour, jaloux.

du, plus, une.

Diphthong

Diphthong sounds in English.

ai = I, fine, hire, life, ride, spy, fly, (a long sound).

ae = met, let, get, men, (a short sound).

iw = you, use, new, due, few, (a long sound).

au = { makes the English sound of *un* or
ug, and is pronounced extremely } unkind, undone, begun,
short, } ugly, but, shut, gut.

ow = how, bough, fow, hour, gown, town, (this diphthong is founded long, dwelling chiefly on the latter vowel).

The letters and sounds, which in modern languages pass under the names of diphthongs, are of such different kinds, that they cannot properly be known by any definition I have seen: for, according to my sense, the greatest part of them are not diphthongs. Therefore, that I may not be misunderstood, I will define a *proper diphthong* to be made in speech, by the blending of *two vowel sounds* so intimately into *one*, that the ear shall hardly be able to distinguish more than one uniform sound; though, if produced for a longer time than usual, it will be found to continue in a sound different from that on which it began, or from its *diphthong sound*.

And therefore the vowels, which are joined to make diphthongs in English, are pronounced much shorter, when so joined, than as single vowels; for if the vowel sounds, of which they are composed, especially the initials, are pronounced so as to be easily and distinctly heard separately, they cease to be diphthongs, and become distinct syllables.

Though the grammarians have divided the vowels into three classes; long, short, and doubtful; I am of opinion, that every one of the seven has both a longer and shorter sound: as,

α is long in *all*, and short in *lock* and *oc* (*lack* and *ac*)

A is long in *arm*, (and short in *cat*.)

E is long in *may* and *make*, and short in *nation*.

I is long in *be*, and short in *it*.

O is longer in *hole* than in *open*; long in *corrode*, short in *corrosive*.

ω is long in *fool*, short (by comparison) in *foolish*.

U is long in *tune* and *plus*, and short in *super* and *du*.

But the shortest sounds of o, ω , and u, are long in comparison with the short sounds of the four first vowels.

The French, the Scotch, and the Welsh, use all these vowel sounds in their common pronunciation; but the English seldom or never sound the u in the French tone (which I have set down as the last in the foregoing list, and which, I believe, was the sound of the Greek $\upsilon\sigma\iota\lambda\omicron\nu$) except in the more refined tone of the court, where it begins to obtain in a few words.

I have been told, the most correct Italians use only five vowel sounds, omitting the first and seventh, or the α and the u. Perhaps the Romans did the same: for it appears by the words which they borrowed from the Greeks in latter times, that they were at a loss how to write the η and the υ in Latin letters.

As the Greeks had all the seven marks, it is to be presumed that at some period they must have used them to express so many different sounds. But having had the opportunity of conversing with a learned modern Greek, I find, though they still use all
the

the seven marks, they are very far from making the distinction among their sounds which nature admits of, and which a perfect language requires: but all nations are continually changing both their language and their pronunciation; though that people, who have marks for seven vowels, which are according to nature the competent number, are the least excusable in suffering any change, whereby the proper distinction is lost.

Some very useful alterations and additions might be made among the consonants, towards attaining a rational orthography. But I forbear to go any farther here, on this head, than just to throw out these hints; from which it may be judged, what very great advantages might arise to the lingual and literary commerce of the world, by a set of learned men sitting down, under some respectable authority, to reform the alphabet, so as to make it contain distinct elementary marks for expressing all the lingual sounds of the European languages at least; in doing which, the difficulty would be infinitely over-balanced by the great and general utility.

So much it was necessary for me to say on the incongruity between our present letters and our natural elementary sounds; because having, for many years past, considered *that* and the *melody* and *measure* of *speech* together, as parts of the same subject, it is probable, I may have used, in the following sheets, expressions with a latent reference to these elementary sounds, which, without this slight explanation, might be unintelligible.

But to return to the immediate subject of the following essay. I set out with supposing the reader to have some practical knowledge of modern music;—I say *practical*, for without that in some degree,

degree, it is next to impossible by *theory* alone, to comprehend clearly and distinctly, either the *rhythmical* or *metrical* divisions of time; the difference between *emphasis* and *force of loudness*; and still less the differences of ACCENT, *acute*, *grave*, and the *circumflexes*. To musicians, these will be no difficulties at all; and a very few lessons of a master, either on a bass viol, or a great * *pitch-pipe*, or the voice, will be sufficient to enable any person, with a tolerable ear, to overcome them.

Music among moderns, though much cultivated for pleasure, has been considered by men of letters, at best, only as a feminine ornament, or an amusement for an hour of relaxation; but, if this system be adopted, the grammarian must either associate with, or submit himself to, the musician, until such time as he himself becomes a musician: for, to make the best use of this knowledge, it should be blended with the first doctrinal elements of speech. And now, in support of this opinion, because I know ancient, or classical, authorities are oftentimes more convincing than modern reason, I will call a few to my assistance. Ælian in his *Various Histories*, b. VII. ch. 15. tells us (Ἡνίκα τῆς θαλάσσης, &c.), “When the Mitylenians had the chief command
“at sea, they inflicted this punishment on their deserting allies,
“*That their children should not learn letters, nor be instructed in*
“*music*; being, in their opinion, the heaviest of all punishments, *to live* (ἐν ἀμαθίᾳ καὶ ἀμουσίᾳ) UNLETTERED and UNMUSICAL.” When *Parmeno*, in Terence’s *Eunuch* (act iii. sc. 2.), is extolling the accomplishments of the slave presented to *Tbais*,

* I mean by a *great pitch-pipe*, any large *flute-pipe*, or *diapason-pipe* of an organ, fitted with a long sliding stopper, by means of which, may be made, sliding tones, like those of the voice.

he says: "Examine him in literature, prove him in gymnastics, "try him in *music*; I will vouch him skilled in every thing "becoming a gentleman." *Socrates*, in *Plato's* dialogue called *Theages*, asks the young man, "Whether his father had not "taught him all those things in which noble youths were com- "monly instructed; γράμματά τε, ἢ κιθαρίζειν, ἢ παλαίειν, ἢ τὴν "ἄλλην ἀγωνίαν; that is, literature, *MUSIC*, wrestling, and the "other exercises." *Xenophon*, treating of the manners of the *Lacedæmonians*, says: "But other Greeks, and especially those "who wish to have their children educated in the most elegant "manner, as soon as they are able to understand what is said, "put them under the care of (παιδαγωγὸς θεραπεύοντας) servants "capable of conducting their education; and immediately also "send them to masters to teach them (ἢ γράμματα, ἢ μουσικὴν, ἢ "τὰ ἐν παλαίστρᾳ,) letters, *music*, and corporal exercises." *Cicero* (in his first book of *Tusculan Questions*) tells us, "Summan "eruditionem Græci sitam censebant in nervorum vocumque "cantibus. Igitur et Epaminondas fidibus præclare "cecinisse dicitur. Themistocles cum in epulis recu- "fasset lyram, habitus est indoctior: ergo in Græciâ musici "floruerunt, discebantque id omnes, nec, qui nesciebat, satis "excultus doctrinâ putabatur." "To sing, and play on mu- "sical instruments, was by the Greeks held to be a chief part "of polite education. Epaminondas was said to have "been a fine performer. Themistocles, for having "refused the lyre at an entertainment, was accounted an igno- "rant fellow. Therefore, in Greece musicians flourished; every "one

“one learned that art; and whosoever knew it not, was looked upon as under-bred.”

We have some *foundations* in England for bringing up scholars both to music and letters at the same time; but hitherto these studies have not been joined together, so as to afford mutual support to each other. In the education of a modern gentleman, music has only been considered on the side of entertainment, not on that of useful erudition: and those who have made this art their profession (with the exception of very few) have seen it in the same light. For to excel in the practical part has been so lucrative, that they have generally given all their time and application to attain that end, to the neglect both of literature and science; and hence, I suppose, it is, that, being looked upon only as the ministers of our pleasures, we do not give them the same rank in public estimation, as we do to the professors of other sciences. Moreover, having never yet blended the study of music and language together, so as to treat the modulation of *speech as a genus of music* under the rules of *Melopœia*, it is not to be wondered at, that the Greek writers in this learning have been overlooked or misunderstood. However, I should think it is in the power of our universities to bring this science (and the arts under it) into some better degree of note than it has been hitherto; and as it lies properly within their province, I hope, they will think it not beneath their attention: for it is too much to expect from the accidental labours of private volunteers, that the overwhelmed ruins of a Herculaneum should be retrieved from rubbish, and restored to their former splendour.

But if the *amateurs* should have inclination and power sufficient to disappoint such an expectation for some time, may we not still hope, that the system proposed in this Essay may be patronized by the ladies. The study of music being almost universally thought a necessary part of their education, they will find no difficulty in understanding the subject of this treatise; and if they should make the care of their nursery their principal amusement, as all the best of them do, may we not expect to see the rising generation instructed by their fair mothers in the joint knowledge of letters and music, and our typical marks of ACCENT, QUANTITY, EMPHASIS, PAUSE, and FORCE, added to their spelling book (which will then be a compleat *Gradus ad Parnassum*), and as familiarly known as the alphabet.

Then if the Attic plant of literature should thus spring from the labours of those lovely pædagogues, its branches may in time spread abroad, and its fruit at length be propagated and cultivated to the utmost perfection in those renowned seminaries of the Muses, on the banks of the Isis and Cam.

* Unskilled in music.—I have met with no one to whom this system has been communicated, that was not immediately convinced of its truth and utility; but some of the *amateurs* (though otherwise persons of genius), upon reflection, have seemed not well pleased with the discovery, by endeavouring to prove its inutility. However inconsistent this conduct may appear, we know, by other instances in mankind, it is not unnatural: for we find many, who are less ashamed to expose their vices, than to acknowledge their poverty.

EXPLANATION OF SOME MARKS OF ABBREVIATION AND MUSICAL TERMS, USED IN THIS TREATISE.

	signifies	{ equal, or equivalent to; as, 2 and 3 = 5; that is, 2 and 3 are equal to 5.
		{ plus, more, or to be added; as 2 + 3 = 5; and $\frac{1}{2} + \frac{1}{2} = 1 = \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$; that is, two halves are equal to one whole; and one whole, being equal to three-thirds; of consequence two halves are equal to three-thirds, as $\frac{1}{2} + \frac{1}{2} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$. So $\text{ } \cdot \text{ } \cdot = \text{ } = \text{ } \text{ } \text{ }$; see page 8, 25, &c.
SUB-DUPLE,		half,
SUB-TRIPLE,		a third,
FORTE,		loud.
PIANO,		soft.
ALLEGRO,		quick, or fast.
ADAGIO,		slow.
LARGO,		a middle degree between fast and slow.
STACCATO,		successive tones with a short pointed expression, and so distinctly sounded, that they seem as if separated by small interruptions.
SOSTENUTO,		the contrary to <i>staccato</i> ; that is, successive tones so blended and so evenly supported, that no interruption of sound can be perceived between them.

All other marks and terms are explained as they occur.

[2]

THE
M E L O D Y A N D M E A S U R E

S P E E C H.

I HAD long entertained opinions concerning the melody and rhythmus of modern languages, and particularly of the English, which made me think our theatrical recitals were capable of being accompanied with a bass, as those of the antient Greeks and Romans were, provided a method of notation were contrived to mark the varying sounds in common speech, which I perceived to run through a large extent between *acute* and *grave*; though they seldom or never coincided, in their periods, with any of the tones or semitones of our ordinary music, which is an imperfect mixture of those two genera, called by the Greeks *diatonic* and *chromatic*.

I was of opinion that, in pronunciation, the voice moved up and down by such small gradations as that, whether the

degrees were by quarters of a diatonic tone, or by smaller divisions, they seemed, in comparison with those of our *chromatico-diatonic*, to be by imperceptible slides.

But though I had often communicated these notions to many gentlemen of genius and learning, as well as capital artists, hoping some of them would turn their minds to the revival of the antient *chromatic* and *enharmonic* genera of music, and of a proper bass accompaniment for the declamation of the stage, so long lost; yet I never digested my own thoughts on paper, till my learned and honoured friend Sir John Pringle, President of the Royal Society, desired me to give him, in writing, my opinion on the *musical part* of a very curious and ingenious work lately published at Edinburgh, on *The Origin and Progress of Language*, which I should find principally in part II. book ii. chap. 4. and 5. wherein several propositions, denying that our language has either the *melody of modulation*, or the *rhythmus of quantity*, gave occasion to the following systematic attempt to prove the contrary. And as the substance of it was originally communicated to that gentleman in two letters, so I have continued the same form of division here, by giving it in two parts.

THE PROPOSITIONS CONTROVERTED.

See Origin and Progress, vol. II. p. 276, &c. “ That there is
 “ no accent, such as the Greek and Latin accents, in any modern
 “ language.—And lastly, the impossibility for us, that are not
 “ accustomed to it, to sound those antient accents, has persuaded
 “ many people that it was as impossible for the antients to do it.”

P. 298. " Mr. Foster would fain persuade us, that in English
 " there are accents, such as in Greek or Latin; but to me, it is
 " evident that there are none such: by which I mean, that
 " we have *no accents upon syllables*, which are musical tones,
 " *differing in acuteness and gravity*. — For though there are
 " changes of voice in our speaking, from *acute to grave*, and
 " *vice versa*, these changes are *not upon syllables*, but *upon words*
 " *or sentences*." P. 299. " Our accents—neither are nor can by
 " their nature be subjected to any rule; whereas the antient,—
 " are governed by rules, &c.—We have accents in English,
 " and syllabic accents too; but there is *no change of the tone in*
 " *them*; the voice is only raised more, so as to be *louder* upon
 " one syllable than another.—That there is no other difference
 " is a matter of fact, that must be determined by musicians.
 " Now I appeal to them, whether they can perceive any dif-
 " ference of tone betwixt the *accented* and *unaccented* syllable
 " of any word? And if there be none, then is the *music of our*
 " *language*, in this respect, *nothing better* than the *music of a*
 " *drum*, in which we perceive no difference except that of
 " *louder or softer*."

P A R T I.

WE suppose the reader to have some knowledge of the modern scale and notation of music, namely the *chromatico-diatonic*; which may be defined practically, as,

A series of sounds *moving distinctly* from grave to acute, or *vice versa* (either gradually or *saltem*) by intervals, of which the semitone (commonly so called) may be the common measure or divisor, without a fraction*, and always dwelling, for a perceptible space of time, on one certain tone.

Whereas the *melody of speech moves* rapidly up or down by *slides*, wherein no graduated distinction of tones or semitones can be measured by the ear; nor does the voice (in our language) ever dwell distinctly, for any perceptible space of time, on any certain level or uniform tone, except the last tone on which the speaker ends or makes a pause. For proof of which definition we refer to experiment, as hereafter directed.

Whilst almost every one perceives and admits singing to be performed by the ascent and descent of the voice through a variety of notes, as palpably and formally different from each other as the steps of a ladder; it seems, at first sight, somewhat extraordinary, that even men of science should not perceive the

* I omit the critical distinction of major and minor tones and the diesis, because the modern chromatico-diatonic octave is practically divided into 12 semitones, supposed equal to the ear.

rapid slides of the voice, upwards and downwards, in common speech. But the knowledge of the various distinct notes of ordinary music is not only laid open to those multitudes who learn that art; but also, being rendered visible and palpable to the unlearned, by the keys of organs and such like instruments, it happens that almost every one knows, the variety of music to arise, in part, from the difference of acute and grave tones.

In traveling through a country, apparently level, how few people perceive the ascents and descents that would astonish them, if the man of art were to demonstrate them by his instrument, and to bring the sluggish stream to form a cascade! In like manner, when the modulation of the melody of speech shall be ripened into method by art, even the vulgar may be taught to know what the learned can now scarce comprehend.

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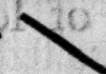
A METHOD OF DELINEATING NOTES OR CHARACTERS TO REPRESENT THE MELODY AND QUANTITY OF THE SLIDES MADE BY THE VOICE IN COMMON SPEECH.

Let the 5 black lines, such as are made use of in noting music, according to the ordinary modern method, be drawn, as in the margin, strong; and let them be interlined with red or faint black; *videlicet*, with two continued lines and one dotted line between them, except in the interval between B and C, and in the interval between E and F, as hereafter explained. So that, supposing the strong black line at bottom to be that whereon the note G is to be marked, then the space between that and the red or faint line next above it, will be the space for $G + \frac{1}{4}$ tone, or $G \times$ (with a single cross); and the said red or faint line itself, being the first red or faint line from the bottom, will be the line for $G + \frac{1}{2}$ a tone, or $G *$ (with a double cross); and the space between this red or faint line, and the dotted line next above it, will be for $G + \frac{3}{4}$ tones, or $G \text{ ***}$ (with a triple cross); the dotted line will be

oh!

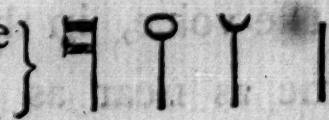
for

for A, the same tone that would have been marked on the whole space, if there had been no red or faint lines at all. The additional quarter tones of $A \times$, $A *$, and $A \text{※}$, will proceed in like manner; and the second strong black line will be for the note B, the next space for $B + \frac{1}{4}$ tone or $B \times$; and here, omitting the continued red or faint line, we come immediately to the dotted one, which is for C; because the interval between B and C contains only two quarters, or a semitone; the interval also between E and F, being of the same dimension, is provided for in a similar manner: and these lines, so drawn, I call the *Scale*.

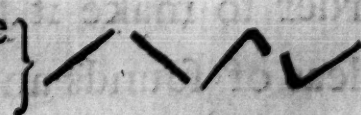
Then, instead of using round or square heads for the notes to be marked on this scale (as in the ordinary music) let us substitute *sloping* or *curving* lines, such as the expression may require; as , or , or , or ; which lines, when drawn on the foregoing scale, will easily shew through how many quarter tones the voice is to slide; and these I call the *accents* or *notes of melody*.

In the next place, the quantity or proportion of time allowed to each note, may be distinguished by adding tails of different forms, always drawn upwards, to prevent confusion, by mistaking the head for the tail, or *vice versa*; because our heads have some resemblance to the tails and ties of quavers in the ordinary music, and our tails have some resemblance to their heads of minims and briefs; as thus,

Various forms of tails to express the difference
of quantity,



The heads which mark the *accent* or difference
of melody,



Tails

Tails and heads joined together, the heads being } at the bottom and the tails drawn upwards, which, being thus joined, form, as it were, one note, expressing both *accent* and *quantity*.



Though we differ somewhat in form, let us however (since the measures of time in music and in speech are both the same) adopt the names by which the different quantities or proportions of time, are distinguished in common music.

Such as a semi-brief = 2 minims = 4 crotchets = 8 quavers.

For which let our marks be, =

And let the rests or pauses be represented thus,

a semi-brief rest = 2 minim rests = 4 crotchet rests = 8 quaver rests.

=

We also adopt the method used in common music, of lengthening a note, by the addition of a point, as,

Then the note, on the foregoing scale, over the interjection *Ob!* whose duration in time is only that of a crotchet, represents the melody of the voice to have made a slide from B to E $\times$, and thence down again to C $\ast$; a flight, up and down, through nineteen quarter tones; and this I apprehend may very properly be called a *circumflex*.

In devising a scheme for expressing on paper the musical slides of the voice, in the melody of speech, I chose one which might come as near as possible to the modern notation of music, in order to make it the easier to be comprehended by those whose ideas of sounds and measure of time are already formed on that plan.

plan: I had no intention of imitating the figures of the Greek accents; and yet, by meer accident, in pursuing my own scheme, I found my new invented notes were exactly in the Greek form. From this fortuitous coincidence, may we not suspect, that we have hit on the true meaning of the Greeks (who wrote, as we do, from the left to the right) by their marks, of *acute* for the slide upwards, and of *grave* for the sliding return downwards: for (omitting the tails, which are only for the purpose of measuring the time,) to mark a slide progressively upwards by our system, it must go thus , and progressively down-

wards, thus, . Why did the Greeks mark their accents

by exactly such sloping lines, if they did not mean them as we do, for the expression of a slide upwards , or of a slide downwards ?

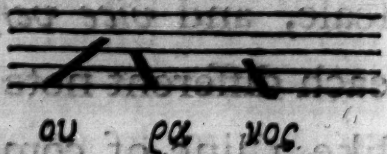
I must allow, however, that this coincidence between the marks which I have adopted and those used by the Greeks is somewhat extraordinary, considering that they called their most acute sound, low; and their most grave sound, high; and also that their distinctions of notes in writing, were not made by position as ours are (that is, the higher notes occupying the higher parts of the scale, and *vice versa*); but their notation ran in one strait line, each different note being distinguished by a particular character, like a line of common writing. But to solve this difficulty to myself, I have supposed their calling the gravest note, high; and the most acute, low; was in relation to the position of their notes on their instruments: for I think their expressions of

ἐπίτασις and ἀνάτασις * as applied to the *acute*, and of ἀνεσις to the *grave*, seem to imply that they considered the voice as ascending to the first, and descending to the last; for unless they had been led by this sentiment, they should have made their marks for the acute and grave quite contrary to what they really did, and to what I have done, by making them conformable to our modern notation of music.

If the learned author of the *Origin and Progress of Language*, had conceived that the melody of our speech was formed by slides, he would have found his quotation (page 278.) from Dion. Thrax. (φώνης ἀπήχησις ἐναρμονίᾳ, ἢ κατ' ἀνάτασιν ἐν τῇ ὀξείᾳ ἢ κατ' ὀμαλισμὸν ἐν τῇ βαρεῖᾳ, ἢ κατὰ περίπλασιν ἐν τῇ περισπωμένῃ) to have been perfectly agreeable to our system; and his difficulty to comprehend why the grave, marked on a last syllable, should (by some commentators be said to) denote the acute would vanish, if he had considered that a grave accent must begin comparatively acute, in order to end grave, by sliding downwards.

The true sense of these words of Dionysius is probably this: "That accent is the change of the enharmonic voice, by an extent or stretch up to the acute, or by levelling it to the grave, or by making a circuit in the circumflex." In other words, sliding up to the acute, sliding down to the grave, and sliding up and down, without change of articulation in the circumflex.

Suppose the word οὐρανός to be noted in our manner: *ού*, with the acute, rose or slid up about a fifth; *ρά*, with a grave, fell or slid



* Aristid. Quint. says expressly (in Meibom. vol. II. p. 8. and 9.) γίνεσθαι δὲ, ἢ μὲν βαρεῖαν, κατὰ τὴν ἀναφερόμεν τῇ πνεύματι, ἢ δ' ὀξύτην, ἐπὶ πολλῇ προεμένῃ; that is, a grave sound is produced from the bottom or lowest part of the breath; and an acute sound, from the top or upper part.

(down to the common level; consequently, to let *vd* slide to the *grave*, in like manner, the voice must be allowed to get to the top, or acute part of the *grave*, in order to slide down again; otherwise, if the identical tone that *pa* ended on should be continued uniformly to the whole of the syllable *vd*, it would fall under the description or definition of common song, by dwelling for a perceptible space of time on one tone. Wherefore I think it must be understood, that *acute* and *grave* were not single fixed tones, like the notes of diatonic music, but were the marks of vocal slides; viz. that the *acute* began *grave* and ended *acute*; and on the contrary, the *grave* began *acute* and ended *grave*.

As all speech, prose as well as poetry, falls naturally under emphatical divisions, which I will call cadences: Let the thesis or pulsation, which points out those divisions, be marked by bars, as in ordinary music. Modern musicians, very improperly, use the words *accented* and *unaccented* in the place of thesis and arsis; but the proper sense of *accent* refers only to the melody of *acute* and *grave*, or diversity of tone; whereas the *thesis* and *arsis* should relate solely to *pulsation* and *remission*. By which diversity of expression, *emphatic* and *remiss*, the modes of time are pointed out, and the measure governed.

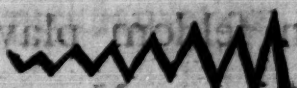
Of modes of time there are only two genera; the one, where the whole time of a *bar*, or *cadence*, is divided by 2, and its sub-duples or sub-triples; the other, where the whole time of a *bar* or *cadence* is divided by three, and its sub-duples or sub-triples. More shall be said of this and of emphasis hereafter, under the head of Measure or Rhythmus.

Almost every syllable in our language (monosyllables excepted) is affected positively either to the *arsis* or *thesis*, though some are of a common nature, and may be used with either.

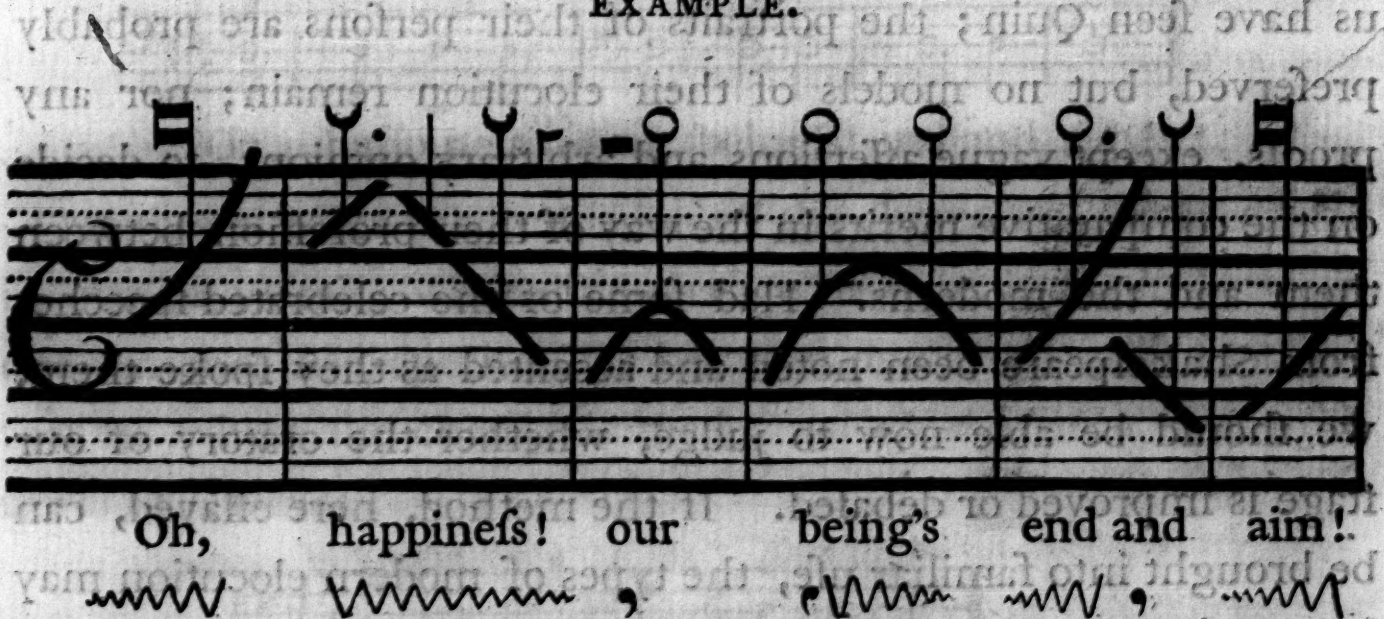
Our heroic, or ten syllable lines, most commonly begin with a syllable under *arsis*: and supposing the line to consist of 5 feet, or rather according to our system, of 5 bars or cadences of musical time (exclusive of rests or pauses), there will be half a bar at the beginning, and half a bar at the end; that is, it will begin with *arsis* and end with *thesis*: but sometimes the affection of the first syllable is so positive to *thesis*, as to oblige the measure of the line to begin with a whole bar (for the beat, or *thesis*, constantly falls on the first note or syllable of the bar); but always some rests or pauses are necessary, as being more agreeable both to the sense and to the measure; so that, including the rests, a line of nominal 5 feet, or ten syllables in words, occupies at least the time of 6 bars or cadences, as in the example following; in which the syllable, *ob!* is positively *emphatical* and under *thesis*, and the syllable *our* (agreeable to the sense in this expression) is, as positively, *remiss*, and under *arsis*.

But here let it be observed, that this *emphasis of cadence* and the *expression of loudness*, are not to be considered as equivalent terms or affections of the same kind; for the *arsis*, or *remiss*, may be *loud*, or *forte*; and the *thesis*, or *emphatic*, *piano* or *soft*, occasionally. The *thesis* and *arsis* being periodically alternate, whether expressed or supposed; whereas the applications of the *forte* and *piano* are *ad libitum*, or *apropos*.

Therefore, beside the characters which distinguish the variety of sounds and of measure of time, there are others required to mark

mark where the *forte* and *piano* should be expressed. The modern musicians have no other characters for these than the words themselves. However, they will be better supplied in our scheme by the asper *ʼ*, and lenis *˘*, of the Greeks *ⲁ*; the *crescendo*, *rinforzando*, or *swell*, by ; and the *smorzando*, or *dying away*, by ; all which will be more conveniently written under than over the words, to prevent their interfering with apostrophes or tittles of the letter *i*.

THE FOREGOING CHARACTERS APPLIED IN THE FOLLOWING
EXAMPLE.



Oh, happinefs! our being's end and aim!

In an attempt so new in our age, as the reducing common speech to regular notes, it will not be expected that this first

* I mean, by adopting these marks, to insinuate a conjecture; and, if I am right, will not the necessity of *two spirits*, as well as two *accents*, be apparent?—Though very learned men have thought otherwise. In the ancient guttural languages, the *forte* was probably aspirated; that is, the sound of the letter *H* was frequently thrown in: for a frequent energetic aspiration is a principal cause of the Irish vicious tone in pronouncing English; and that aspirated tone is derived from the original Irish language, which, like all the other antient languages, is extremely guttural.

essay should be extremely accurate; for there is a great latitude in the slides not only of different speakers, but also of the same speaker at different times.

People who play by ear on instruments of music, as well as those who play by notes, can seldom play their voluntaries a second time without great variation. Now all people, orators of pulpit, bar, and stage, in respect of the melody and rhythmus of language, are but as players of voluntaries exhibiting by ear, having no notes as a test or standard to prove their correctness, and to measure the degrees of their excellence.

We have heard of Betterton, Booth, and Wilks, and some of us have seen Quin; the portraits of their persons are probably preserved, but no models of their elocution remain; nor any proofs, except vague assertions and arbitrary opinions, to decide on the comparative merits in the way of their profession, between them and the moderns. Had some of the celebrated speeches from Shakespeare been noted and accented as they spoke them, we should be able now to judge, whether the oratory of our stage is improved or debased. If the method, here essayed, can be brought into familiar use, the types of modern elocution may be transmitted to posterity as accurately as we have received the musical compositions of Corelli.

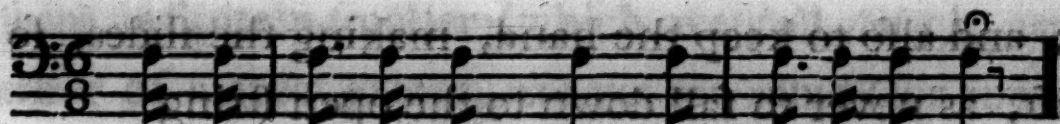
But perfection and accuracy in this art can only be attained by experience and a close attention, in estimating the pitch and extent of vocal slides by the ear, with the assistance of a proper instrument.

I hope, however, this example will shew, that the *melody of speech* is formed by *slides*; and that by these, or some other apt characters,

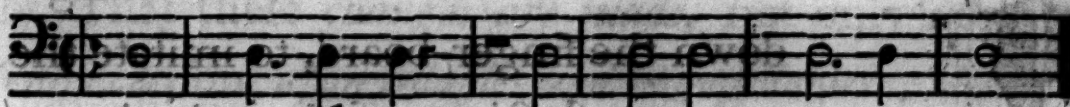
characters; the musical expression of speech may be described and communicated in writing.

But if this essay be not sufficient to prove what the *melody of speech* is, let us, in the next place, endeavour to shew *what it is not*.

It is not like the proclamation of a parish-clerk announcing the psalm,



Let us sing to the praise and glory of God!
where the whole sentence is in one tone, without any change of acute or grave.



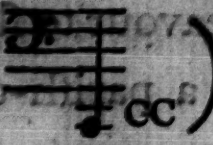
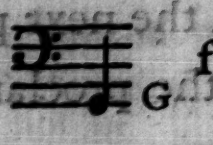
Oh, happiness!—our being's end and aim!
Neither is it like the intonation of the chorostates, or precentor in our cathedrals, where the change of tone is made between one sentence and another, or between one word and another; that is, where the change is made, *not upon syllables, but upon words or sentences*.



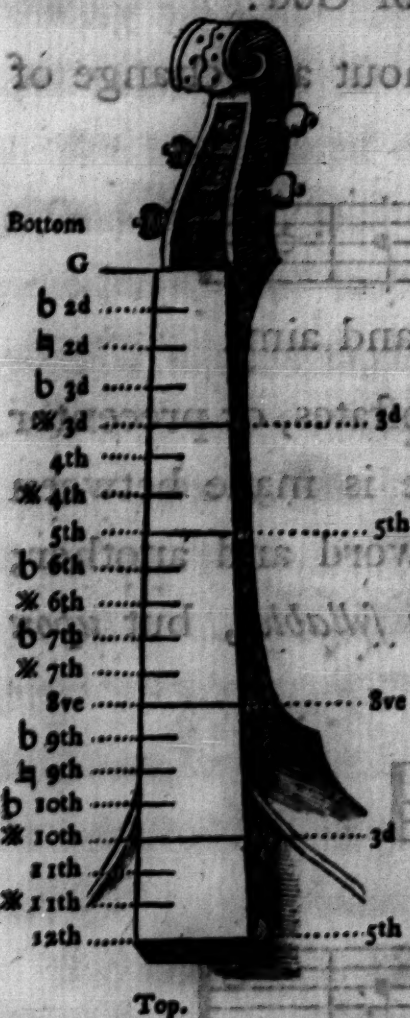
Lord! have mercy upon us!
Oh, happiness!—our being's end and aim!

Now to submit these several examples to the judgement of common ears, let a bass viol have a paper pasted on the whole length of the finger-board near the 4th string, marking all the chromatico-

chromatico-diatonic stops or frets, suitable to that bass, from the bottom to the top, as in the figure represented below.

For the experiment of the slides, let the 4th string (though actually tuned to ) be called  for the sake of

keeping our slides within the compass of the five black lines, or nearly so; and also to keep the hand, making the slides, so high on the shift, as never to fall down to the open string.



Then while the player draws the bow over the 4th string, let him try, by sliding his left hand on the same string up or down the finger-board, to imitate the rapid turns or flections of the voice in common speech, and he will soon find, that they will have either their beginnings or endings, for the most part, in the intervals between the fretts; which intermediate stops, we may call quarter tones: for it will be accurate enough for our purpose, to call every degree of tone a quarter, that does not coincide with any tone or semitone of the chromatico-diatonic. And then, if he can pronounce, being thus assisted by the in-

strument, all the foregoing examples, as they are written or noted, the auditors will most probably agree in the following conclusions.

ist, That

1st, That the sound or *melody of speech* is not monotonous, or confined like the *sound of a drum*, to exhibit no other changes than those of *loud* or *soft*.

2dly, That the changes of voice from *acute* to *grave*, and *vice versâ*, do not proceed by pointed degrees coinciding with the divisions of the chromatico-diatonic scale; but by gradations that seem infinitely smaller (which we call *slides*); and though altogether of a great extent, are yet too rapid (for inexperienced ears) to be distinctly sub-divided; consequently they must be submitted to some other *genus of music* than either the diatonic or chromatic.

3dly, That these changes are made, not only upon words and upon sentences, but upon syllables and monosyllables. Also,

4thly, and lastly, That in our changes on syllables or monosyllables, the voice slides, at least, through as great an extent as the Greeks allowed to their accents; that is, through a fifth, more or less.

PART II.

THE art of music, whether applied to speaking, singing, or dancing, is divided into two great branches, *sound* and *measure*, more familiarly called *tune* and *time*. Instead of which words, I use (for the most part) the Greek terms of *melody* and *rhythmus*, being more significant, as generals, than our vulgar terms.

Whether the notes or characters used by the Greeks for writing their music, were as good or better than ours, is a matter worth the labour of the curious to enquire into: but the modern scale and notes (which may be called the accidence of our musical grammar) are now so thoroughly known all over Europe, that, with a little alteration and addition, they will serve better for the exponents of what I have to offer concerning *rhythmus*, than if I was to attempt to follow the obscure track of another system, now totally unknown to the majority, and only very imperfectly to the few.

When the *cadences* of our language, either poetry or prose, are properly marked in our way, every person initiated in the practical knowledge of music, will be able to comprehend our meaning, and to read the words according to the *melody* and *rhythmus* we shall mark to them. Neither would the Greek feet, under all their various names, answer in any suitable degree to the *rhythmus* of our language; for the commentators have told us,

3

their

their long and short syllables were in proportion to each other, only as 2 to 1; whereas in our rhythmus we have the several proportions of 2. 1. $\frac{1}{2}$. $\frac{1}{4}$. and 3. 1. $\frac{1}{3}$. $\frac{1}{6}$, all which will appear in the examples which we shall set down. Besides, I apprehend, whoever takes up the consideration of this subject in our way, will find it much easier to examine it in the Greek system afterwards, when he may perhaps be able to detect the errors of commentators, some of whom, not being musicians, misunderstood the subject they undertook to expound.

The fifth chapter of part II. book ii. of *The Origin and Progress of Language*, treats, according to the plan of the contents placed at the head of the chapter, "Of rhythm in general, and the
 "division of it into the rhythm of motion without sound.—
 "Sub-division of the rhythm of sound into five different species.—Of that species of it which is called quantity or metre.—
 "Verse in English not made by quantity, but by what we call
 "accent." The ingenious author resolves the different perceptions, of *sound*, as acute and grave; of *cadence*, as arsis and thesis; of *quantity*, as long and short; and of *quality*, as loud and soft; into one original cause, *motion*. Which, however true, seems not so necessary in this place, as it would have been to have described, in apt terms, how these several effects of motion differed from each other. He has very justly explained the true sense of the term *accent*; and yet, from too much complaisance to a vulgar error, uses it in a sense contrary to his own definition, and contrary to his own very sensible remark at the end of this chapter. "In matters of science, the ideas of different things
 "should be kept, and expressed by different names: for, as I

“ observed before, I am persuaded that it was some such confusion in the use of the word *prosody*, that contributed to lead men into the error concerning the ancient *accents*.” p. 328. Therefore, in order to avoid the confusion made by moderns in the misuse of the word *accent*, let us call the note or syllable on which the cadence falls, *heavy*, and, where necessary, denote it by this mark (Δ); and the note, or syllable, erroneously called *unaccented*, we will call *light*, and mark it thus ($\therefore$); and as we shall find, there are two sorts of light notes, let the lightest be represented thus ($\therefore$).

Our breathing, the beating of our pulse, and our movement in walking, make the division of time by pointed and regular *cadences*, familiar and natural to us. Each of these movements, or *cadences*, is divided into two alternate motions, significantly expressed by the Greek words *arsis* and *thesis*, *raising* and *posing*, or setting down; the latter of which, coming down as it were with weight, is what we mean to call *heavy*, being the most energetic or emphatic of the two; the other, being more remiss, and with less emphasis, we call *light*.

So when we lift our foot, in order to walk, that motion is *arsis*, or *light*; and when we put it on the ground, in order to proceed, that act of posing is *thesis*, or *heavy*.

If we count on our fingers every step or *cadence* we make in walking, we shall find each of them consisting of, and subdivided by, these two motions, *arsis* and *thesis*, or the *light* and the *heavy*; and if we count only on every second *cadence* or step (which makes a pace), we shall find each pace subdivided by
four

four motions; two of which will be *theses* or *heavy*, and the other two *arses* or *light*.

This division of the step by the even number 2, and of the pace by the even number 4, naturally arises from the walk of a sound or perfect man.

The halting of a lame man makes a pace divisible into six, instead of four; that is, the *thesis* or *posing* of one of his feet rests twice as long on the ground as that of the other foot; consequently, in each pace of this lame walk, there will be one *thesis* of so much greater weight or emphasis than the other, that the second thesis appears, in comparison with it, to be light. Wherefore this whole pace is considered only as one cadence, divided unequally into heavy (Δ), lightest ($\therefore$), light ($\therefore$), and lightest ($\therefore$).

Here then are two general modes or MEASURES of time. The *first*, wherein each step makes a *cadence*, and is divided equally by the even number 2, and the pace, or *double cadence*, by 4; and is in music called *common time*, *andante*, or the MEASURE of a march. The *second*, where the whole pace, making only *one cadence*, may be equally divided by the number 6, as the double of 3; and is called *triple time*, or the MEASURE of the minuet and jig.

But the two steps composing the pace of triple time,

are so far dissimilar, that one of them is composed by 3 + 1, and the other by 1 + 1; as,



which diversity, when

slow,

slow, makes the graceful variety of the minuet; and, when faster, the merry hobble of the jig *.

Now all speech, as well as other music, is subject to the influence of CADENCE, by *arsis* and *thesis*, or the *light* and the *heavy*, as well as of MEASURE, which determines those cadences to the *common* or the *triple*, and likewise to the affection of QUANTITY (as an inferior division of RHYTHMUS or MEASURE) by the *long* and the *short*.

And as the *length* of syllables, as well as their particular affections to the *light* and the *heavy*, is various, according to the genius of the language; so some words and sentences must be measured by *common time*, and some by *triple time*.

Musicians mark the modes or *measures* of time, according to which their music is to be performed, by prefixing at the beginning of the movement, the marks $\frac{2}{4}$, or the letter C or C for common time; and 3, or $\frac{3}{4}$, or $\frac{6}{8}$, or any of the multiples of 3, in the numerators for triple time (the denominator serving only to shew into how many parts a semibrief is supposed to be divided in that air); and at every *cadence* a perpendicular stroke or *bar* is put, or supposed; as thus,



* It is probable the Greeks derived their notions of the rhythmus in music from the action of walking, by their having made the word *foot* a principal term in the art of prosody.

cause two or more cadences may be comprized within the space called a bar, as in the second example, or there may be a bar at every cadence, as in the first; the bar of itself being of no other signification than as an eye-mark to the performer, to shew where some cadences are, by which he can easily observe the others: for, at the pleasure of the composer, the space between bar and bar may contain either 1, or 2, or 3, or 4, or 6, or 8, or 9, or 12, &c. cadences; that is, any number of cadences which may be the multiples of 2 or of 3, but whereof neither 5, 7, 11, 13, or any prime number, except the foregoing 2 or 3, shall be the divisors or factors: (I mean this more strictly as applied to the composition of music, than to the *rhythmus* of speech; and perhaps the number 5, as being composed of the prime number 2 and 3, should be also excepted.) But here I will observe again, that (in common music) no less than a whole pace must be allowed for a cadence of triple measure; because, as before mentioned, it is composed of two unequal steps. However, in the *rhythmus* of speech, where the two *genera* are continually intermixed, the *triple cadence* is only equal to one step.

In the above examples, I have written the marks of *light* and *heavy*, over the notes, and of the *piano* and *forte*, under them, in order to shew clearly, that there are five orders of accidents incident to melody and measure, essentially different in their nature and effects from each other, and very material to be attended to in the consideration of the melody and measure of speech.

For

For I conceive,

Speech	to consist of	{	melody by slides	{	acute and grave	}	loud or soft.
{	measure or rhythmus	{	of motion and rest distinguished by	{	quantity and cadence	{	long and short. heavy and light.

And here it may be proper to recapitulate and bring the several marks, which we have adopted for the expression of these five orders of accidents, into one view.

1st, ACCENT. Acute  grave , or both combined .

2dly, QUANTITY. Longest , long , short , shortest .

3dly, PAUSE or *silence*. Semibrief rest , minim rest , crotchet rest , quaver rest .

4thly, EMPHASIS or *cadence*. Heavy , light , lightest .

5thly, FORCE or *quality of sound*. Loud , louder , soft, softer . Swelling or increasing in loudness , decreasing in loudness or dying away . Loudness uniformly continued .

Also the sub-division of bars or *cadences* may be, at the pleasure of the composer, in any fractional parts, the sum of which will make up the whole *quantity* of the bar or *cadence*, provided that the denominators of the said fractional parts are always, either sub-duples or sub-triples, of the whole number of the bar or *cadence*. And also all measured *rests* or pauses are as significant in computation of time and in value of place, respecting cadence or the heavy

heavy and light, as express notes of sound. For example, let the time of a whole bar in a piece of music be equal to 1, then the sub-division of other bars in the same piece may be $\frac{1}{2} + \frac{1}{2} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{1}{2} + \frac{1}{4} + \frac{1}{4} = \frac{3}{6} + \frac{1}{6} + \frac{2}{6} = \frac{2}{3} + \frac{1}{3} = \frac{2}{3} + \frac{1}{6} + \frac{1}{6} = \frac{1}{2} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \frac{1}{2} + \frac{3}{6} = \frac{3}{12} + \frac{1}{12} + \frac{2}{12} + \frac{3}{12} + \frac{1}{12} + \frac{2}{12}$, &c. the sum of each bar making always 1. And this diversity of division within a *cadence* or bar is the subject of quantity.

That member of *rhythmus* which I call a *cadence*, has, in my system, nearly the same effect as that which by the Greeks was called *metron*.

The division of $\frac{1}{2} + \frac{1}{2}$ is naturally governed by the andante or walking cadence of a perfect man.

The division of $\frac{2}{3} + \frac{1}{3}$ is the halting of a lame man, or minuet measure.

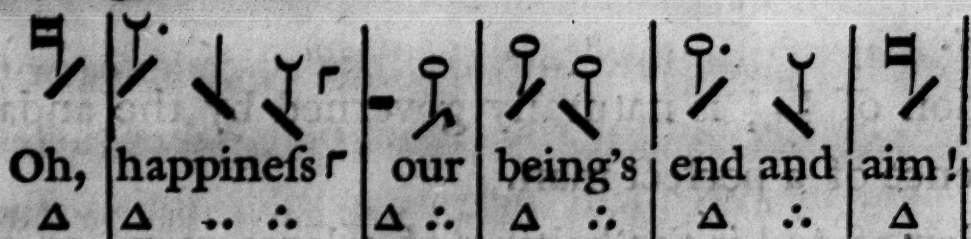
And the $\frac{3}{12} + \frac{1}{12} + \frac{2}{12} + \frac{3}{12} + \frac{1}{12} + \frac{2}{12}$, or, as commonly marked by musicians, $\frac{6}{8}$ *, equivalent to $\frac{3}{16} + \frac{1}{16} + \frac{2}{16} + \frac{3}{16} + \frac{1}{16} + \frac{2}{16}$, is the cantering of a horse, or the measure of a jig. The example in page 15, of the parish clerk announcing the psalm, is in this measure; the natural *rhythmus* and metres of those words will admit of no other.

The division of all rhythmical sounds by the multiples or sub-duples of 2 or of 3, is so strongly affected by our nature, that either a tune or a discourse will give some uneasiness, or at least not be quite satisfactory to nice ears †, if its whole duration be

* $\frac{6}{8}$, the denominator 8, shews into how many parts a semibrief is supposed to be divided, and consequently, that a bar of this measure contains only three quarters of a semibrief. If a semibrief represented any positive length of time, this rule, of making it appear as a standard, would have some useful meaning; but as its length is only relative, it has little or none, and the figures 2 and 3 would be sufficient to denote all changes of measure, and be more simple and more satisfactory.

† The ^{2d} movement in the celebrated overture of *La Buona Figliuola* has this defect, and every nice ear feels it.

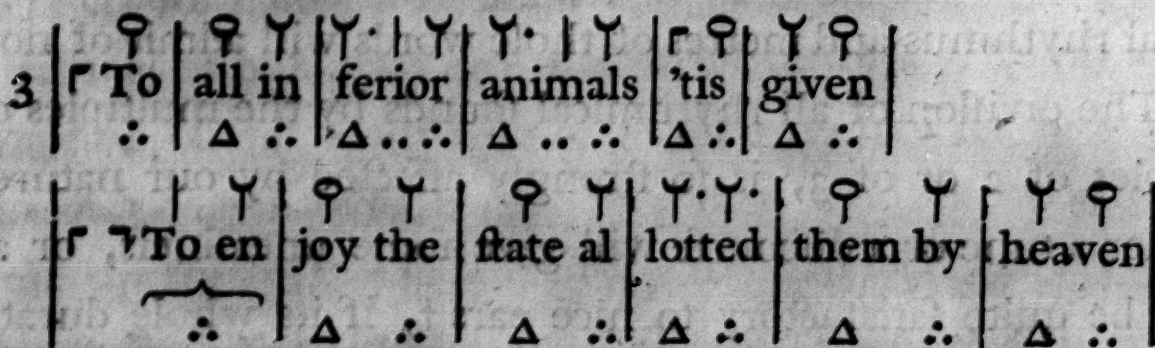
not measured by an even number of *complete cadences*, commensurable with, and divisible, by 2 or by 3. For this reason, the judicious composer or orator (if he does not mean to make his audience restless) will lengthen his piece with proper expletives, or with adequate rests or pauses, so as to make his periods duly commensurable*. And whoever would pronounce our heroic lines of ten syllables with propriety, must allow at least six cadences, by the assistance of proper rests, to each line, and frequently eight; as,



in six bars or cadences; or in eight bars, as the following:



ANOTHER EXAMPLE OF SIX CADENCES.



* It were to be wished, that something more than an assertion, with an appeal to nature, and a conjecture, could be offered as an illustration of this mysterious law. But may not space of time be analogous to space in geometry? which can only be equally and uniformly divided by quadrilateral or triangular polygons, their multiples, or sub-duples; that is, by squares □, parallelograms ▭, triangles Δ, or hexagons ⬡; for with a series of pentagons or heptagons, or any other polygons than those first mentioned, no space can be uniformly covered, without leaving void interstices of heterogeneous forms; whereas any quadrilateral or triangular space can be completely covered with homogeneous quadrilateral or triangular figures.

○	○	Y	○	Y	○	Y	○	Y	○	P		
	⌈ No		vain re		searches		e'er dif		turb their		rest	
	∴		Δ ∴		Δ ∴		Δ ∴		Δ ∴		Δ	

○	○	Y	○	Y	Y	Y	Y	⌈	○	○	⌈	
	⌈ No		fears of		dark fu		turity		mo		left.	
	∴		Δ ∴		Δ ∴		Δ ∴		Δ ∴		Δ	

Or the second line thus,

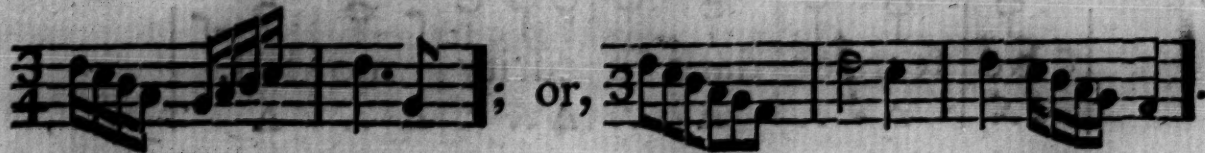
Y	Y	○	Y	○	Y	Y	Y	Y	Y	Y	○	
	⌈ To en		joy the		state al		lotted them		by		heaven	
	∴		Δ ∴		Δ ∴		Δ ∴		Δ ∴		Δ ∴	

Which division of the line into six bars or cadences of time, is as little as can be allowed for the reader or speaker to fetch his breath; and this in the plain narrative stile, for if there be required any very pointed expression, more rests or pauses must be thrown in, which must necessarily either increase the number of bars, or, by using shorter notes in some parts, throw the syllables of two bars into the time of one, or partly one, partly the other. Wherefore our heroic lines are truly *hexameters*.

The *thesis* or *heavy* note or syllable, on which the hand or foot beats time, is always the first in the bar; and if in that place, instead of an express note of sound, there should be marked a rest, then the thesis or heavy part of the cadence falls on that rest: the last note in a bar (or in that extent which we allow to a cadence) is always *light*. If there be only one note or syllable which fills the whole extent of a cadence, of course, that one note is at first heavy, and then the latter continuance supposed light. For these affections are always alternate, except cut off by rests, or long-holding tones, without change of articulation. If a cadence be sub-divided into many notes or syllables, they

shall be nearly divided under the several degrees of emphasis of heavy (Δ), light ($\therefore$), and lightest ($\therefore$); as thus,

Δ $\ddot{\cdot}$ Δ $\ddot{\cdot}$ $\Delta \dots \ddot{\cdot}$ $\Delta \ddot{\cdot}$ $\Delta \dots \ddot{\cdot}$



Having premised so much, I will now give a general precept and example in the following sentence:

2
4 Every sentence in our language, whether prose or verse,

has a rhythmus peculiar to it self;

3
4 That is, in the language of modern mu- ficians, it is

either in common time or triple time; vi- delicet,

minuet time, or jig time, or mixed.

To the first member of the above sentence (which I have written in common time, as marked by $\frac{2}{4}$), I have noted the *accents*, the *quantity* and *cadence*; to the latter member, which is in triple measure, I have only marked *quantity* and *cadence*, together with the proper *rests* or *pauses* throughout the whole. I have

have omitted the marks of *piano* and *forte*, because in calm unempassioned sentences the addition of those expressions, to any sensible degree, would convert plain discourse into bombast.

Where this mark $\underbrace{\quad}$ *minu* or $\underbrace{\quad}$ *in the* is used, it is to shew, that as many syllables or rests as are written over that line or embrace, are all to pass as one in respect of the Δ , or the $\therefore$.

I will now shew some small alterations that may be made in the measure of the foregoing example, and fill up the rests, between *rhythmus* and *peculiar*, by expletives.

3	3				
3	3	3	3	3	3
4	4	4	4	4	4
Every	sentence	in	our	language.	
$\Delta \therefore \therefore$	$\Delta \therefore \therefore$	$\Delta \therefore \therefore$	$\Delta \therefore \therefore$	$\Delta \therefore \therefore$	$\Delta \therefore \therefore$

The mark $\underbrace{\quad}$ shews, that those three notes wrote under that arch pass off in the time of two; by which means, the two modes, *common* and *triple*, are easily intermixed.

In this alteration, the monosyllable *in* (one of our pliant syllables) which before was *heavy* and *acute*, becomes *light* and *grave*: and *our* becomes *heavy* on the diphthong *ou*, and *light* on the liquid *r*; and extending to the length of two syllables, is accented with a circumflex, as before.

2	2	2	2	2	2	2	2
2	2	2	2	2	2	2	2
Has	a	rhythmus	of its	own pe	culiar	to it	self.
$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$	$\Delta \therefore$

The foregoing example consists in the whole of 32 bars or cadences, including the rests, which were absolutely necessary, in

in order to pronounce it with propriety; and with those rests it divides into 8 rhythmical *clauses*, of 4 *cadences* in each.

Though I have given a scale, in my first part, in order to demonstrate with accuracy, the nature and extent of the slides we make in speech, yet with a little practice I found, that drawing my slides on the common five black lines was sufficient (at least for a person who is already a musician and master of the language) to direct the voice to the proper tones; for there is a great latitude which may be used without any seeming blemish; as whether the slide runs a quarter of a tone or three quarters, up and down, more or less, seems of little consequence, provided the proprieties of (the RHYTHMUS) *quantity and cadence*, are duly observed. And with still more practice I found, that drawing the accents simply over the syllables, without the black lines, (but with some regard to higher or lower, by position of the marks, as in the examples here given), was so certain a guide, that I could always read the sentences, *so marked*, nearly in the same melody; but the other four accidents, of *quantity, pausing, emphasis, and fortepiano*, excepting the last, I could no how abridge or omit. And I also found, that the marks of *quantity, pausing, and emphasis* alone, were so sufficient that a native needed scarce any farther help to read with surprising correctness of expression; though I must acknowledge the meaning of a sentence may often be entirely altered, by changing the accent from acute to grave, or *vice versa*.

I will now set down some of the lines of English poetry (quoted by the learned author of *The Origin and Progress of Language*, in the first edition of his 8th chap. of book iii. part II.) which I will accompany with the marks of *rests, quantity, and cadence*

cadence, in order to shew, that the method of measuring by the Greek feet, without any allowance for pauses, is inaccurate and indecisive: for, since the ingenious author admitted (what he called accent, by us called) *cadence* of *heavy* and *light* to be in our language, though he denied us to have quantity, it will appear, that his verses of five feet consist at least of six *cadences*, and commonly those of four feet consist of five. Lines which consist of five *cadences* or metres have less grace and dignity than those of six or eight.

3 | Daughter of | God and | man, | ac | complish'd | Eve. |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

| Pleasures, | the | Sex, | as | children | birds pur | sue. |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

| Tho' deep, | yet clear; | tho' gentle, | yet not | dull; |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

| Strong, | without | rage; | with | out o'er | flowing | full. |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

Or thus, as pronounced by Mr. GARRICK:

| Strong with | ont | rage; | with | out o'er | flowing | full. |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

| Thou, | Stella, | wast no | longer | young, |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

| When | first, for | thee, my | lyre I | strung. |
 Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

I shall

I shall omit the *Hudibrastic*, of rhyming upon *a stick*; because, though such doggrell may help out a laugh, the particle *a*, in English, is so absolutely *light*, that it cannot be put in the heavy part of the cadence, without violence to our pronounciation and a shock to gravity.

Before Porto Bello lying.

If this was the original of this song, the *vox populi*, whose ears were too nice to suffer so barbarous a misapplication of the word *before*, have long since altered it to

As near	Porto	Bello	lying,
Δ ..	Δ ..	Δ ..	Δ ..
On the	gently	swelling	flood. r
Δ ..	Δ ..	Δ ..	Δ ..

For *be*, in the word *before*, is so positively *light* that it cannot bear to be put out of its place; though *be*, as a monosyllable, is so pliant as to serve any where; and the latter syllable *fore*, is as positively *heavy*, and cannot without the greatest violence be put under the *light*.

3 r 7	Y	Y.	Y	Y.	Y	Y.	Y	Y. r
From the	knaves, and the	fools, and the	fops of the	time,				
Δ ..	Δ ..	Δ ..	Δ ..	Δ ..				
r 7	Y	Y.	Y	Y.	Y	Y.	Y	Y. r 7
From the	drudges in	prose, and the	triflers in	rhyme.				
Δ ..	Δ ..	Δ ..	Δ ..	Δ ..				

My

My time, oh, ye Muses, was happily spent,
 When Phoebe went with me, where ever I went.
 If e'er in thy fight, I found favour, Apollo,
 De fend me from all the disasters that follow.

These three distichs are all in triple time and jig measure; and the syllable more or less, at first or at last, makes no difference in the rhythmus. In applying my rules to these examples, I endeavour to do justice to the proper measure of our language, without the least intention of adapting them to the feet of the Greek prosody.

I shall add one more from the 9th chap. page 403.

3 Place me in regions of eternal winter,
 Where not a blossom to the breeze can open; but
 Darkening tempests, closing all around me,
 Chill the creation.

Place me where sun-shine evermore me scorches;
 Δ .. Δ .. Δ .. Δ ..

Climes where no mortal builds his habitation;
 Δ .. Δ .. Δ .. Δ ..

Yet with my charmer fondly will I wander
 Δ .. Δ .. Δ .. Δ ..

Fondly conversing.
 Δ .. Δ ..

Now if after all I have said, any one should still doubt or deny that our language has both melody and measure, I would refer to the following experiment:

Take three common men; one a native of Aberdeenshire, another of Tipperary, and the third of Somersetshire; and let them converse together in the English language, in the presence of any gentleman of the courtly tone of the metropolis; his ears will soon inform him, that every one of them talks in a tone very different from his own, and from each other; and that their difference of tone is not owing merely to *loud* and *soft*, but to a variety both of melody and of measure, by a different application of *accents*, acute and grave; and of *quantity*, short and long; and of *cadence*, light and heavy. Every one of the four persons will perceive the other three have very distinct tones from each other,

other, and that the tone of each is plainly distinguished by the *alto* and *basso*, though each in particular may fancy his own tone to be quite uniform, and in the unison with itself.

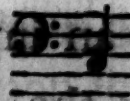
The extreme familiarity existing between a man and his native language, makes him lose all sense of its features, of its deformities, and of its beauties; though under this state of indifference, if the love of variety, so natural to man, should prone him into a liking of some foreign tongue, such a circumstance may make him very sharp-sighted towards the faults of his own, and as blind to its perfections. I will not pretend to compare our language to the Greek; but as to its melody, I think it about as good as the Latin, and much better than French or German, though far inferior to the Italian, which, in that quality, exceeds the Greek; I say, exceeds the Greek in melody, as far as we can judge of the Greek pronunciation; for, I apprehend, the best Grecians in modern Europe, not excepting the inhabitants of Greece itself, know no more of the ancient tone of that language, as it was spoken in the age of Demosthenes, than we do of the British in the age of Alfred, and much less than an English boarding-school miss does of the Parisian tone of French.

Having proceeded so far in this system, as to convince myself that our language, under the influence of the two general modes of time, common and triple, has an exact *rhythmus*, both as to *cadence*, by the *heavy* and the *light*, and as to *quantity*, by the *long* and the *short*; and also that it has an *accented melody* of great variety and extent by *slides*, *acute* and *grave*, and *mixed* in the *circumflex*; my next endeavour was to find out, whether our

theatrical declamation might not be agreeably and advantageously assisted, as well as that of the ancient Greeks and Romans, by a suitable bass accompaniment.

I considered, that as the prosodical changes of the voice by *slides*, acute and grave, were very rapid, the bass accompaniment ought, by the rules of harmony, to be very sedate, with little or no motion by the acute or grave: for, in the *diatonic genus*, whenever the cantus takes a rapid flight, either up or down, through all the notes of the octave, the most proper and agreeable bass is one continued sound, either of the *fundamental key-note*, or of the 4th to the key-note, or of the 5th to the key, or of two of them sounded together, in discord or harmony, as the occasion and the taste of the composer may require. Neither could it be proper for the accompaniment of the slides, to exhibit the sound of the bass otherwise than by *tasto solo sostenuto*, or one holding note; because to continue it *staccato*, or by several repeated strokes, might interfere with, and confound, the articulation of the speaker. Experience must teach us when this note may be intermitted, and when changed for another.

I therefore concluded, that there could be no occasion, in the accompaniment of speech, for the bass to sound any other tone than the fundamental of the key, its fourth, or its fifth; or the key-note with its fifth, in concord; or perhaps with its *fourth reversed*, also in concord: because, while any of these are continued sounding, the voice, by sliding through the whole extent of the octave, must, in its progress, exhibit every concord of harmony that is possible between two sounds. And therefore I made trial of the fundamental (or deepest note on the instrument) that seemed to be key-note to the common level of my voice

voice in speaking, which I suppose to be  C of comfort pitch, and made use of the open tone of the fourth string of a violincello,

 which was the octave below * my common level.

I found my slides in common discourse went about a fifth (of the diatonic scale) above the level or key-note, and about a seventh below it; but if empaffioned, it run two whole tones higher, which made in the whole extent a compass of 13 notes, or octave and sixth.

Height of empaffioned speech,
Of common discourse,
Common level, . . .
Lowest note of speech, . . .



I sometimes added the fifth (or the open tone of the third string) in harmony with the fundamental; and perhaps if there was another string, a fifth below the fundamental (which would be the fourth of the key reversed), the harmony of that, with the fundamental, might be occasionally used with advantage; for though the fourth may be had, by letting the third string down to that tone, and the fifth also, by stopping the same string (so let down) on the second fret, yet the effect is different; because the fourth above, in conjunction with the key-note, makes a

* The deeper the fundamental bass is taken, the more agreeable it will sound; that is, it will be better to be two octaves below the cantus than one: for, the farther two discordant notes are removed from each other, the less harsh their discord will sound to the ear; as the ninth sounds less uncouth than the second, and the sixteenth still less so than the ninth; but especially the more grave the accompanying sound is, the less it will tend to out-voice the speaker.

Whether a stringed instrument with a bow, or wind instruments, such as very deep flutes or French horns, will have the best effect, must be proved by future experiments.

discord,

discord, or at best an imperfect concord; but being reversed, it falls a fifth below the key-note, and consequently sounds in concord with it.

I then read, and at the same time founded continually the bass, observing the proper expressions of the forte and piano, and sometimes, where it was marked forte, adding the harmony of the fifth to the bass, as in the example annexed.



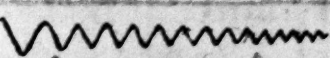
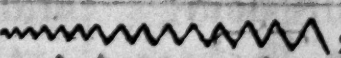
Where the notes for the slides are drawn in this form  it is to shew that the sound hangs longer on the first part of the slide than on the last, on account of the vowels.

I made several other trials on the same principles, both alone, and calling in the judgement of others; the result whereof is, that I remain confirmed in the opinion, that an accompaniment animates the reader or speaker to pronounce with more confidence, and pleasure to himself, than he could without it.

That it will be advantageous both to elocution and action on the stage, in all tragic and heroic dramas, whether mixed with other music or not; but especially in all operas, where the species

species of song called *Recitative accompanied**, will be an agreeable medium between this and the common song.

That being generally played soft, and being a very low or grave sound, it does not seem, in the least, to out-voice the speaker, so as to interrupt the hearing.

That by the discreet use of the forte and piano, with the occasional addition of the fifth, it enlivens, or softens, the impassioned expressions, according to the proper degree; and would contribute much to keep an actor in the true pitch of expression, neither ranting above, nor sinking below, what the nature of his part required, supposing the marks of ϵ and γ ,  and , and the occasional addition of the fifth in harmony, to be judiciously written; and as exactly performed by the accompanying musician.

It is so many years since I saw the tragedy of Hamlet performed, that I have no remembrance of the expressions sufficient to enable me to set the following speech in the manner of any great actor: but as it was one of those which I made my experiment upon with the bass accompaniment. I shall set it down as I pronounced it, the first nine lines accented and fully noted, the

* The ordinary Italian recitative seems to be an endeavour, under some obscure traditional hints (the memory of which is now lost), to continue the ancient manner of accompanied declamation; the basses of which being generally by a *tasto solo* on a ground, or single note, seem, according to our system, to countenance this conjecture; but for the rest, the moderns having no proper idea of the ancient chromatic or enharmonic genera, and none at all of the melody and vocal slides in speech, write the cantus of their recitative in the chromatico-diatonic, which, until our ears are debauched into a customary liking, sounds unnatural and disgusting.

remainder with all the marks of expression, but without the accents.

That being generally played soft, and being a very low or grave sound, it does not seem, in the least, to out-

Largo.



The tone for the bass accompaniment.

To be! or not to be! that is the question.

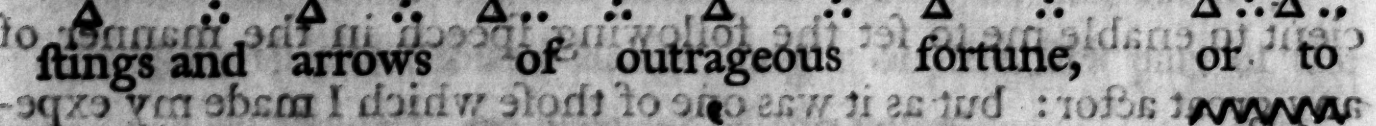
whether 'tis nobler in the mind to suffer the



stings and arrows of outrageous fortune, or to



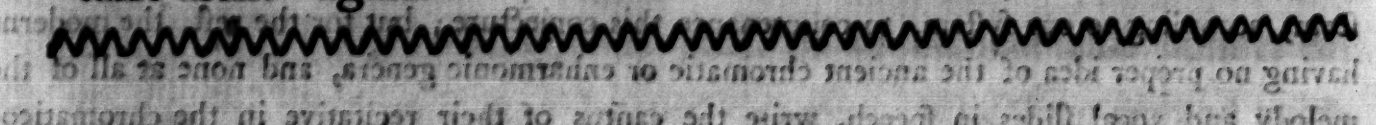
take arms against affail of troubles, and by op-



posing

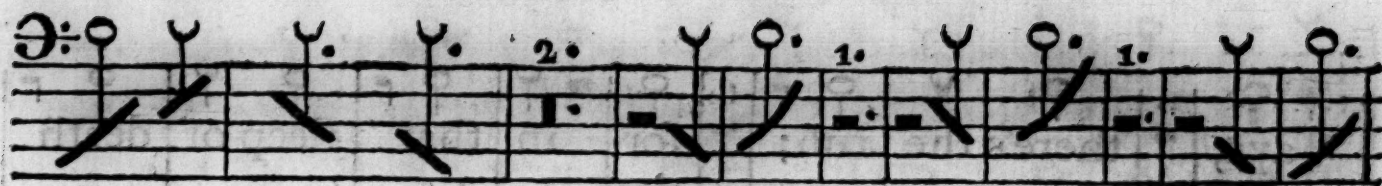


posing

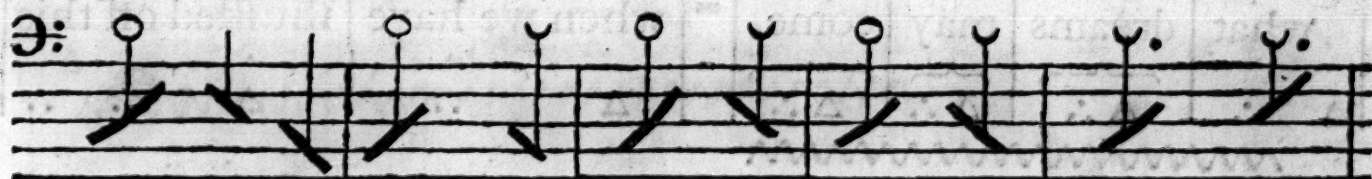


posing





posing, end them?— to die,— to sleep,— No more,
 ~~~~~



and by a sleep, to say, we end the heart ach,



and the thousand na tu ral fhocks that flesh is



heir to:— 'tis a consummation devoutly to be wish'd.  
 ~~~~~



To die—to sleep—to sleep! per chance to dream;



1. aye, there's the rub; 1. for in that sleep of death

what dreams may come, when we have shuffled off this

mortal coil, must give us pause. 2. There's the ref-

Allegretto.

pect that makes calamity of so long life: 2.) for

who would bear the whips and scorns of time, th' op

pressor's wrong, the proud man's contumely, the

pang

pang of def- pis'd love, the law's de- lay, the

insolence of office, and the spurns that 3.) patient merit,

of the un worthy takes; when he him self might

his qui etus make, with a bare bodkin? 2.) who would

Largo.
fardles bear, 3.) to groan and sweat under a weary life,

I. but that the dread of something after death, (that undif-

covered country, from whose bourne no traveller returns)

puzzles the will; and makes us rather bear the ills we

have, than fly to others that we know not of. Thus

conscience does make cowards of us all: and thus the

native hue of resolution is ficklied o'er with the

pale cast of thought: and enter prizes of great pith and

moment, with this regard, their currents turn a wry,

Allegretto.

Largo.

and lose the name of action. Soft you, now! the

fair

fair Op helia? Nymph, in thy or ifons, be all my

fins re member'd.

VARIATIONS.

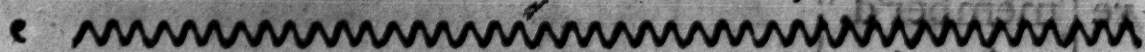
To die — to sleep — no more!

and by a sleep to say, we end the heart ach,

and the thousand natural flocks that flesh is heir to;



—'tis a consummation devoutly to be wish'd!



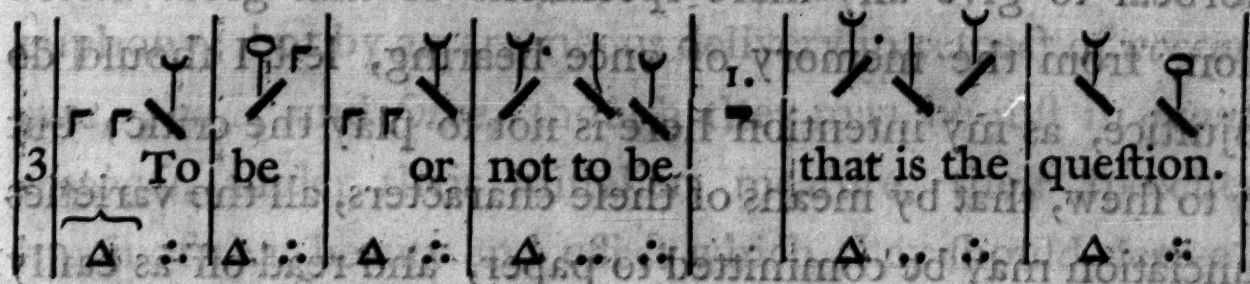
But to conclude, as the practice of the enharmonic genus of music, and the art of reducing the *melody* and *measure* of speech to practicable and legible notes (if it was ever compleat), and of accompanying the same by a *continual bass**, have lain, as it were, in a *terra incognita*, for at least a thousand years past, I think, these small specimens produced, may be our vouchers to prove, that we have discovered the land, and marked out the route which may be followed by others: and therefore, I hope, gallant adventurers will not be wanting, to push these discoveries further, to explore and bring to light those rich curiosities that still lie hid in the interior parts of the country.

* In the modern practice of music there seems no significant reason, why the common accompanying bass, of all sorts of airs, should be called *basso continuo*, or *thorough bass*, unless the term was taken from that bass, which, by accompanying theatrical declamation, was *continued* all *thorough* the performance, while the other basses, for the accompaniment of incidental chromatic or diatonic airs, as interludes, were only introduced now and then. For the fact is, the modern *basso continuo* is no more continual than the cantus, or any other part of the symphony. Nor do I know any thing which can properly be called a thorough bass, in our days, except the drone of that ancient instrument the bag-pipe, made by *tibiis imparibus*, sounding exactly the two notes (key note and fifth) which I have made use of in these experiments.

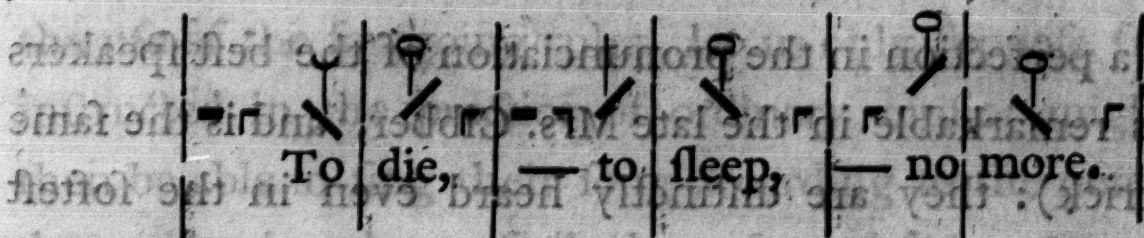
SINCE writing the foregoing treatise, I have heard Mr. Garrick in the character of Hamlet; and the principal differences that I can remember, between his manner, and what I have marked in the treatise, are as follow:

In the first place, that speech, or soliloque, which I (for want of better judgement) have noted in the stile of a ranting actor, swelled with *forte* and softened with *piano*, he delivered with little or no distinction of *piano* and *forte*, but nearly uniform; something below the ordinary force, or, as a musician would say, *sotto voce*, or *sempre poco piano*.

Secondly, as to measure, the first line thus:



Thirdly, as to accent and quantity, thus:



The words, *as flesh is heir to!* he pronounced as I have marked them in my variation, page 46.; where the two syllables, *heir to*, are both acuted, and by that modulation, give the idea of the sense

sense being suspended, for the thought which immediately follows.

Lastly, *Nymph, in thy orisons*, he pronounced in common measure, as,

2 Nymph, in thy orisons,

making the word *orisons* quite different from mine; I was led to make the first syllable *o* short and light, and the second *ri* long and heavy, by supposing the word to have been originally Norman French, *oraison*; but I suppose I was wrong in this, as in every other instance where I have shewn the difference. I shall forbear to give any more specimens of that great actor's elocution, from the memory of once hearing, lest I should do him injustice, as my intention here is not to play the critic; but merely to shew, that by means of these characters, all the varieties of enunciation may be committed to paper, and read off as easily as the air of a song tune.

There is a perfection in the pronunciation of the best speakers (which was remarkable in the late Mrs. Cibber, and is the same in Mr. Garrick): they are distinctly heard even in the softest sounds of their voices; when others are scarcely intelligible, though offensively loud.

This essential quality is chiefly owing to the speaker's dwelling with nearly uniform loudness on the whole length of every syllable,

syllable, and confining the extent of the accents, acute and grave, within the compass of four or five tones; and also to adopting, in general, a deliberate instead of a rapid measure.

For if a person pronounces from six to nine syllables in a second of time, as many people do, an auditor must be extremely quick and attentive to be able to keep up with so rapid an utterance.

But good speakers do not pronounce above three syllables in a second, and generally only two and a half, taking in the necessary pauses.

There are several public speakers, whose speeches, if committed to paper, would appear to have combined all the force of logical argument, all the flowers of rhetoric, with an elegant choice of words capable of being pronounced with graceful euphony; but by an erroneous delivery in respect of *accent*, *rhythm*, *pause*, and *force*, though they may be just in *quantity* and *emphasis*, under their mistaken measure, their speeches want much of that beauty and effect which they should derive from a proper enunciation.

Now to shew that such errors might easily be corrected, by the use of the foregoing rules, let us only suppose such speakers instructed in the practice of ordinary music; might they not then be able to sing their song according to the notes set before them, keeping the prescribed *measure* of *fast* or *slow*; and, under *quantity*, observing the just *pauses*, and the several expressions of *staccato*, or *sofienuto*; and also of *piano* or *forte*? And this being admitted, the practicability of the other (which is by much the easier of the two) cannot be denied.

The tenor of speech in private conversation may be (*allegro* or) rapid; for there, if the auditor misses a word, he may desire the speaker to repeat his sentence: but all discourses delivered to a large audience should be (*largo e sostenuto*) deliberate, and the sound of each syllable, as to loudness, continued uniformly audible to its just length or *quantity*.

In the various tumults of passion, the voice runs very high into the *acute*, and very low into the *grave*; but in speaking to an audience, where the first intention is to be heard, and the next to invite attention, the excesses of *acute* and *grave* should be avoided, particularly the latter; because few people fall to a very *grave accent* without dwindling into a whisper: and as long sounds are more audible than short ones, all syllables (I repeat it again) should be supported to the full extent of their proper quantity with nearly an uniform strength of voice, and not dying away, or interrupted by rests after every syllable, as if they were fighed out, nor so as to give a *staccato* or short-pointed expression, both which manners, though natural in passions, are unseemly and disadvantageous in argumentative oratory; and in general, all rapid pronunciation keeps the audience in a painful attention, which the want of proper pauses increases, by leaving them no time to assist their apprehension by recollection.

I will exemplify what I have said by setting a few lines, from Leland's Demosthenes, in three different manners.

First

First manner. *Bombastic, by an excess in the extension of acute and grave, and of the piano and forte, and the tones not sostenuto or equally supported.*

* *Ordinary walking measure.*

And now, if ever we stood in need of mature

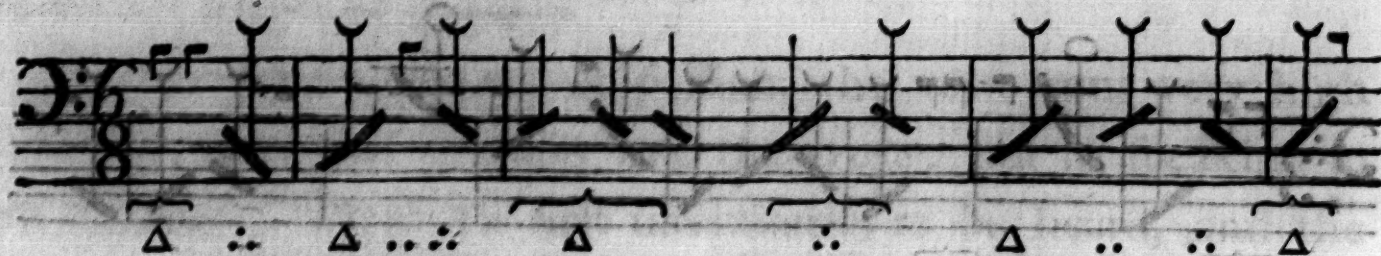
de li be ra ti on and counsel, the present juncture

calls loudly for them; we must be careful, &c.

* *Walking measure* means, that the duration of the whole quantity of syllables and pauses contained in *one cadence* (that is, as much as are marked between two bars), should be equal to the time of making one step of walking; which admits the varieties of *slow, ordinary, and quick walking*; the next degree above which, in velocity, is *running measure*.

Second manner. *Too rapid, though in an uniform tenor of loudness.*

Corrente, or running measure.



And now, if ever we stood in need of mature



deliberation and counsel, the present juncture calls



loudly for them; we must be careful not to drive



those to ex tremities who are, &c..

Third

Third manner. *Slow, firm, and uniformly loud.*

Walking measure.



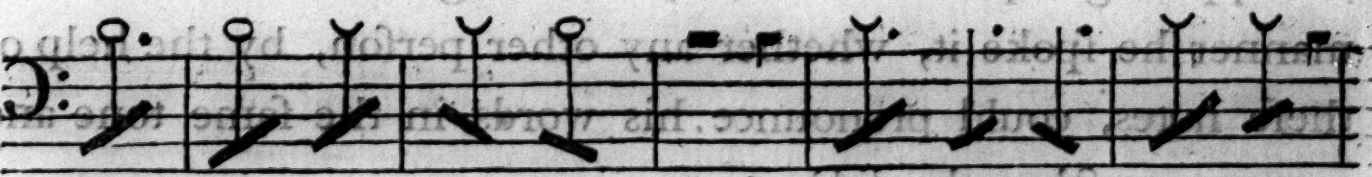
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And now, if ever we stood in need of mature



Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

de li be ra ti on and coun sel, the pre sent jun cture



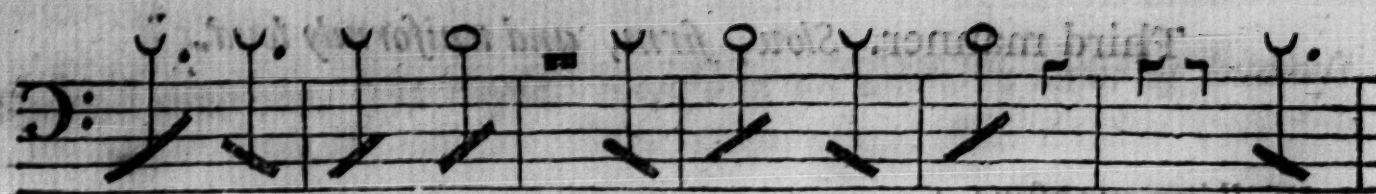
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calls loudly for them; we must be careful



Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

not to drive those to ex tre mi ties who are



now af sem bled, and call themselves the



council of Am phycti ons.

When this system was explained to Mr. Garrick, among many judicious remarks and queries, he asked this question:

Supposing a speech was noted, according to these rules, in the manner he spoke it, whether any other person, by the help of these notes, could pronounce his words in the same tone and manner exactly as he did?

To which he was answered thus:

Suppose a first-rate musician had written down a piece of music, which he had played exquisitely well on an exceeding fine toned violin; another performer with an ordinary fiddle might undoubtedly play every note the same as the great master, though perhaps with less ease and elegance of expression; but, notwithstanding his correctness in the tune and manner, nothing could prevent the audience from perceiving that the natural
tone

tone of his instrument was execrable: so, though these rules may enable a master to teach a just application of accent, emphasis, and all the other proper expressions of the voice in speaking, which will go a great way in the improvement of elocution, yet they cannot give a sweet voice where Nature has denied it.

“ I HAVE been much pleased and instructed, by the very ingenious Dissertation you have sent me from your musical friend, and am now fully convinced that there is both a melody and a harmony even in our common speech in English. As to melody, I was before convinced that there was a different tone in the different languages of Europe. Secondly, that in the same language there is a variation of tone, arising from the passions, or even the likeness of the speaker; but I did not know before, that in plain speech, without passion, merriment, or any other mark of character, there was any variation of tone; and even after reading the Dissertation, I was very unwilling to believe that there was any variation upon the same syllable. I was soon convinced that there was a variation in the whole tenor or the speech; so that before we had spoken two or more sentences, or even one sentence to an end, the tone of the voice is changed: but I thought this change proceeded from word to word, or from different syllables of the same word, without any change upon the same syllable. But upon considering the matter more and comparing with some learned musicians of this place,

OBSER-

OBSERVATIONS AND QUERIES, BY THE AUTHOR OF
 THE ORIGIN AND PROGRESS OF LANGUAGE, IN
 HIS ANSWER TO SIR J. P. WHO HAD TRANSMITTED TO HIM
 THE TWO LETTERS CONTAINING THE FOREGOING SYSTEM.

§ 1. “ I HAVE perused with much pleasure and instruction,
 “ the very ingenious dissertation you have sent me from
 “ your musical friend, and am now fully convinced that there
 “ is both a *melody* and *rhythm* even in our common speech in
 “ English. As to melody, I was before convinced that there
 “ was a different tone in the different languages of Europe.
 “ Secondly, that in the same language there is a variation of
 “ tone, arising from the passions, or even the character, of the
 “ speaker; but I did not know before, that in plain speech,
 “ without passion, humour, or any other mark of character,
 “ there was any variation of tone: and even after reading the
 “ dissertation, I was very unwilling to believe that there was any
 “ variation upon the same syllable. I was soon convinced that
 “ there was a variation in the whole tenor of the speech; so that
 “ before we had spoken two or more sentences, or even one
 “ sentence to an end, the tone of the voice is changed: but I
 “ thought this change proceeded from word to word, or from
 “ different syllables of the same word, without any change upon
 “ the same syllable. But upon considering the matter more
 “ fully, and conferring with some learned musicians of this
 “ place,

“place, I am convinced that Mr. S— is in the right, and that
 “the voice does not rest in the same tone, even upon the same
 “syllable; but goes on continually changing, not only upon
 “different words and syllables, but upon the same syllable.
 “And indeed I now begin to think, that to keep the voice in the
 “same tone, even for the shortest time, or, in other words,
 “to speak in a perfect monotony, is a thing of art which nobody
 “but a musician can perform. I am also convinced, that the
 “voice does not only rise or fall upon the same syllable (I mean
 “in musical modulation), but also that it sometimes does both
 “rise and fall upon the same syllable, particularly upon such
 “syllables as make a word by themselves, or are pronounced
 “with any pathos; such as the syllable *ob!* given as an instance
 “by Mr. S—, who has observed, with great accuracy, that the
 “voice rises upon this monosyllable twelve enharmonic intervals
 “or quarter tones, but falls only seven. Such syllables he very
 “properly calls *circumflex*; and he has made a distinction of
 “them, which no grammarian ever made, but which, for any
 “thing I know, may be well founded in the use of the English
 “language; into those circumflexes which begin with rising and
 “end with falling; and those which, *vice versa*, begin with
 “falling and end with rising. And the observation he has
 “made on the circumflex † of the monosyllable *ob!* that it does
 “not fall so much as it rises by five quarter tones, is also an
 “observation, I am persuaded, entirely new, and such as could
 “have been made only by a man of so nice an ear, and so accu-
 “rate an observer, as Mr. S—.

† This and the following marks refer to the answers hereafter given to these observations.

§ 2. " † But still it remains to be considered, whether there
 " be any difference with respect to tone, betwixt the accented
 " and unaccented syllables of words in English; that is to say,
 " whether the voice does not rise or fall in its tone, or do both,
 " upon what is commonly called the accented syllable, as upon
 " any other. Upon this point, I hope, Mr. S— will take the
 " trouble to inform me. If it be true, that there is no difference
 " in this respect betwixt the accented and unaccented syllables in
 " English, then I am in the right in saying, that it is only loud-
 " ness or softness in the pronunciation which distinguishes these
 " syllables from the rest;—that it is by this variety, and this
 " variety only, that all the various kinds of verse are made in
 " English, more various than the verse of any other language in
 " Europe; because none of these languages has its syllables so
 " much distinguished in that way: whereas in point of tone
 " there is not, I believe, any great difference betwixt them and
 " the English. This is a matter of some curiosity, and I hope
 " Mr. S— will think it worth his while to consider it atten-
 " tively.

§ 3. " As to the Greek accents Mr. S— supposes, that the
 " voice rose by slides up to a fifth, which made the acute accent,
 " and fell down again upon the next syllable in the same way;
 " and that in the circumflex accent it slid up and down
 " upon the same syllable. I was much inclined at first to
 " reject this hypothesis, and to suppose, that the voice rose at
 " once upon the acuted syllable, and fell at once to the grave,
 " as commonly happens in music; but upon studying attentively
 " the passages which I have myself quoted from the ancient
 " writers.

“ writers of music, *videlicet*, Aristoxenus and Gaudentius (vol.
 “ II. p. 286.), and likewise from Dionysius Thrax. (*ibid.* p. 278),
 “ which I see is observed by Mr. S—, I am fully convinced, that
 “ in founding the acute accent in Greek the voice rose by slides
 “ to a fifth, and fell again upon the next syllable in the same
 “ manner; and that it both rose and fell in that way upon the
 “ circumflex accent; and that this way of rising and falling was
 “ the principal distinction betwixt the melody of speech and of
 “ music. Upon this supposition, the pronunciation of the Greek
 “ language will not be so like chanting, as it would be, if the
 “ voice had risen at once to a fifth upon a single syllable, and
 “ will be much liker the pronunciation of our English, though I
 “ think it is impossible to deny, that it was much more musical.
 “ For upon every word of Greek that was not an enclitic, the
 “ voice rose a fifth, which is certainly not the case in English,
 “ though I do not deny, that the tone of a whole declamation,
 “ or perhaps of one sentence of it, may, by small intervals, rise
 “ even higher; and perhaps upon one single passionate word,
 “ such as *ob!* the tone may come near a fifth. And indeed I
 “ think we need no other proof of the Greek language being
 “ more musical than ours, than that it was a beauty in their
 “ composition to arrange their acute and circumflex accents, so
 “ as to make a variety in the melody of their language agreeable
 “ to the ear. See what I have said upon this subject, p. 386. *et*
 “ *seq.* of vol. II. Now this is a beauty of composition unknown
 “ in English. And so much for the *melody* of speech, consisting
 “ of the mixture of *acute* and *grave*, to which, as Mr. S— very
 “ properly observes, the word *accent* ought to be intirely appro-

" priated, that being its true etymological signification. I have
 " indeed used it in its common meaning in English; but, I think,
 " I have always distinguished it from accent, properly so called,
 " by the addition of *English* to it, or some other expression,
 " which, I hope, has removed all ambiguity, though I acknow-
 " ledge that it were better that different things were distinguished
 " by different names; and that, in treating a subject scientifically,
 " so much complaisance should not be shewn to vulgar use as to
 " confound different things under the same name. I will there-
 " fore for the future, use Mr. S—'s terms of *light* and *heavy*,
 " which correspond very well to the ancient terms of *arsis* and
 " *thesis*.

§ 4. " Besides *acute* and *grave*, Mr. S— observes in common
 " speech three things; videlicet, *light* and *heavy*, *forte* and *piano*,
 " or *loud* and *soft*, under which are included *swelling* and *dying*
 " away, being modifications of loud and soft; and lastly, *long*
 " and *short*. || Now as I am no musician, I am not able to
 " make the distinction betwixt *light* and *heavy*, and *loud* and *soft*;
 " and though I have consulted more than one of the greatest
 " musicians here, I cannot discover the difference; nor do they
 " seem to me to understand it any more than I do, even in music.
 " And as to words, I cannot conceive how the *heavy*, or accented
 " syllable, as it is commonly called, should be sounded *soft*, or
 " the *light* syllable *loud*. I can indeed conceive how the whole
 " sentence may be pronounced in a softer or louder voice; but
 " still the *heavy* syllable will be *louder* than the rest, and the *light*,
 " *softer*. Now I hope Mr. S— will take the trouble to explain this.
 " As to the difference betwixt *short* and *long* (that is, *quantity*), and
 " bearing 3

" *light*

“ *light and heavy*, I perfectly agree with him: and I am also
 “ convinced, that we have not only long and short syllables in
 “ English; but that some syllables are four times as long as
 “ others, even without the vowel or diphthong, being lengthened
 “ by position; that is, by the addition of consonants in the same
 “ syllable; and so I find Mr. S— has marked some of them in
 “ the notation that he has given us of the music of some sen-
 “ tences. It was not so in the learned languages; for there,
 “ though a long syllable was made somewhat longer by the
 “ addition of consonants, and a short syllable shorter by the
 “ taking them away, a long vowel was always to a short vowel
 “ in the ratio of two to one; for a long vowel was just the short
 “ vowel twice pronounced. But we are not to expect that a
 “ barbarous language such as the English, not formed by rules
 “ of art, should be so regular in its pronunciation.

“ Upon the whole, it is my opinion, and I find it is the
 “ opinion of all the musical men here to whom I have shewn it,
 “ that Mr. S—’s Dissertation is a most ingenious performance.
 “ It is reducing to an art what was thought incapable of all rule
 “ and measure; and it shews, that there is a melody and rhythm
 “ in our language, which I doubt not may be improved, by
 “ observing and noting what is most excellent of the kind in the
 “ best speakers. In that way I should think that both the voice
 “ and ear of those who do not speak so well might be mended,
 “ and even the declamation of our best actors may be improved,
 “ by observing in what respects they fall short or exceed; for as
 “ soon as a thing is reduced to art, faults will be found in the
 “ best performers, that were not before observed. If ever I publish
 “ another

"another edition of my second volume, I shall certainly make
 "that part of it, which treats of the melody and rhythm of
 "speech, more perfect from his observations, if he will allow
 "me to make use of them. It is true what he observes, that I
 "have, in explaining that matter, gone to very general prin-
 "ciples, and made many divisions of the subject, more perhaps
 "than are necessary for practice; but I profess to give the philo-
 "sophical principles of every part of language, and, as I see
 "that Mr. S— is a man of a philosophical turn, as well as a
 "practical musician, I must beg the favour that he would let
 "me know, if he thinks I have erred in the philosophy of that
 "part of language."

LETTER

LETTER TO THE AUTHOR OF THE ORIGIN AND PROGRESS
OF LANGUAGE, AT EDINBURGH.

London, March 17, 1775.

I CONFESS it is a long time since my much esteemed friend Sir J. P. communicated to me the *Queries and Observations* made by your l—p on my little treatise concerning the melody and measure of speech: observations that do me great honour, and at the same time impress me with the highest opinion of your candour and condescension, in adopting a system so contrary to what your l—p and many other great men have so ably advanced.

Temporary and unavoidable business has prevented me hitherto from giving the attention that was absolutely necessary in order to give your l—p satisfactory answers to your doubts.

The method I have taken for that end is this: I have read over the 5th chap. of book ii. vol. II. of your very learned and ingenious work, and have set down my further remarks thereon, referring generally to the page; after which, I again read over and considered your l—p's remarks and queries, and thereupon added such explanations as I thought would remove all difficulties. From which, together with the re-consideration of the treatise, I hope your l—p will comprehend my meaning in full.

In the study of music, as in common arts, an artist can attain a much more apparent degree of perfection, without knowledge in the theory, than a theorist can without practice in the art.

Hence it happens, that the carpenter who works, unconscious of the science, under the rules of geometry, though he cannot demonstrate a single proposition, is, in the eyes of the vulgar, a more valuable man than a perfect geometrician.—The practising musicians are often without a tincture of the theory; for to excel to a certain degree in playing, and even to compose in taste, are both far short of that theory in which your l—p has entered very deep. The greatest part of the skill of some great masters is derived more from practice and *instinct*, than from the study of first principles; therefore I do not much wonder that your l—p had not satisfactory answers to your inquiries among them.

The desire your l—p expresses, to make use of my treatise in a re-publication of your excellent system, does me too much honour to suffer me to make the least objection.

I am about to print privately a few copies, somewhat more enlarged than that your l—p had, in order to submit it to the judgement and correction of my friends; among whom, I shall be very happy if you will permit me to count your l—p.

I am, &c.

eight notes; being also each of them a whole bar's length; and
unions with the semi-brief; so are they, properly, sub-articu-
lations of the original semi-brief.

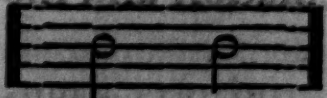
Speech is necessarily articulated by syllables, in as much as two
syllables cannot possibly be founded or pronounced, without articu-
lating or dividing the tone, under which they are to be founded;

FARTHER REMARKS ON THE ORIGIN AND PROGRESS OF LANGUAGE, VOL. II, BOOK II. CHAP. 5.

PAGE 304. "This rhythm (with sound) is of two kinds;
"for it is either of sounds not articulated, which may be
"called musical rhythm; or it is of sounds articulated; and that
"is the rhythm of language."

REMARK.

Language is articulated by syllables; and *MUSIC* is articulated
by a division of any one sound into many or more than one
sound; as suppose the semi-brief equal in dura-
tion of time to the swing of a pendulum of 160
inches, to be put as the complement of a bar
in music; it can be articulated into two minims,



or four crotchets,



or eight quavers,



Therefore the semi-brief being a continued sound of one whole
bar's length; and its several sub-divisions into two, four, and

eight notes, being also each of them a whole bar's length, and unisons with the semi-brief; so are they, properly, sub-articulations of the original semi-brief.

Speech is necessarily articulated by syllables, in as much as two syllables cannot possibly be founded or pronounced, without articulating or dividing the tone, under which they are to be founded, into two parts, at the least; for if the word *folly* were to be sung under the tone of , the finger must necessarily divide that tone

into two articulated parts, as  or . I have said, into two parts at least, because when words are joined with music (in the modern stile) even syllables, by the aid thereof, are capable of being variously and minutely articulated, as

 which, independent of music, they are not. A division of notes, which are unisons with each other, is a division simply by articulation. Those which are not unisons, but either ascend or descend, are divided both by articulation and modulation.

Page 305. and 306. "And first it is evident, that without
"some change of one kind or another in the sound, there could
"be no rhythm, &c. — In order, therefore, to know the nature
"of rhythm, when applied to sound, we must consider the
"several changes and modifications which sound admits. The
"first

"first and most sensible variation, is when the sound ceases
"altogether, &c."

REMARK.

Our animal existence being regulated by our pulse, we seem to have an instinctive sense of *rhythmus*, as connected with, and governing, all sounds and all motions; whence it follows, that we find all people feel the effects of *rhythmus*, as they do those of light and warmth derived from the Sun; so that, without searching for the reason, it has generally been passed over as a first principle, or self-evident truth.

From this instinctive sense of *rhythmus*, when we mean to measure either motions or sounds continued, articulated, or interrupted by shorter or longer pauses, we must pre-suppose an exact periodical pulsation, as regular as the swings of a pendulum, the length of which periodical pulsation we may vary according to our pleasure, as often as we would chuse to quicken or slacken the movement; and then all continuation of sounds or pauses are to be subserviently measured and regulated by this uniform and steady pulsation, as long as that proportion of pulsation (or pendulum) shall be continued.

Page 307. "The question then is, what changes continued
"sound admits of, and what are the rhythms thence arising?
"And there is one obvious change which very strongly strikes
"the sense; namely, that from *louder to softer*, or *vice versa*."

REMARK.

The variety of *loud* and *soft* should never be considered as (necessarily) a governing principle of *rhythmus*; because though it may, sometimes, be accidentally coincident with rhythmical pulsation, yet it would be offensive if it continued so for any considerable length of time: for the application of *the loud* and *the soft*, both in music and language, either for use or ornament, must not be indiscriminate or periodically alternate, but as occasion calls for it; whereas the rhythmical pulsation is regularly periodical and constant as the swings of a pendulum, but of itself implies no noise or sound at all. And agreeable to this, a band of musicians are much better governed in their measures by a *silent* waving of the hand, or of any thing that may catch the eye, than by the more ordinary *noisy* way of beating time with the foot.

The expressions, or rather the affections of *heavy* and *light* are necessarily the governing principles of *rhythmus*; for they are as constantly alternate and periodical as the pulse itself, and they must be continued, by conception in the mind, during all measured rests or pauses, as well as during the continuance of either uniform, articulated, or modulating sounds.

The affections of *heavy* and *light* were always felt in music, though erroneously called by some moderns *accented* and *unaccented*; however, the *accented*, or *heavy note*, was never understood to be *necessarily loud*, and the other *necessarily soft*; because if it were so, there could be no occasion for separate directions, where to apply the *forte* and *piano*, in as much as the affections
of

of *heavy* and *light* are continued in every *cadence* of every air, from the beginning to the end: whereas the *forte* and *piano* are often applied directly contrary to *heavy* and *light*; as in the following example, almost all the *heavy* notes are *piano*, and the *light* notes, *forte*.



Therefore the distinctions of *loud* and *soft* must not be reckoned among the governing powers of *rhythmus*, though they may sometimes accidentally, or occasionally, coincide with the *heavy* and *light*, which are the true and only governing principles of it.

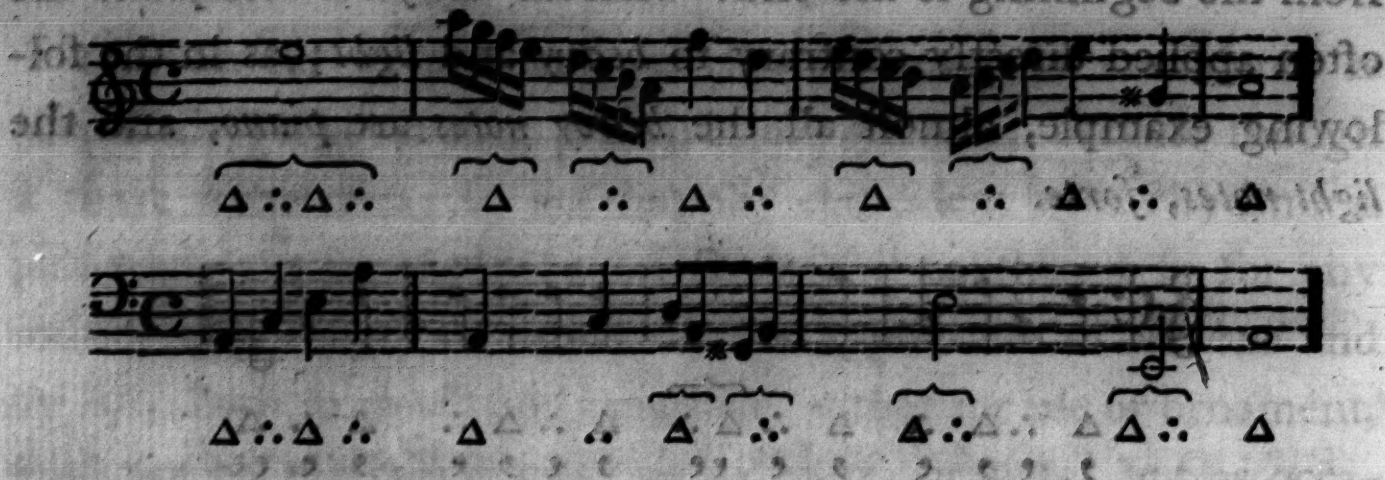
Page 310. — "That sound which continues any length of time, we call a *long sound*; and that which continues a short time, we call a *short sound*. And as this quality of sound depends intirely upon the time of its duration, it is commonly known by the name of *time*."

REMARK.

This is not what is called *time* in music. *Time* is measured by *pulsation*, quicker or slower. The *pulsation* of any one sort of *time* must continue as uniform as the swinging of a pendulum of a given length; but the intervals between the *pulses* of the pendulum may be filled variously.

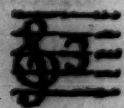
As,

As, for example:



Supposing these four bars of music equal to four swings of a pendulum, the whole is but one sort of *time*, notwithstanding the sub-division, or articulation, in the several bars, is different; and consequently, there is a great variety of *longer* and *shorter* (that is, of *quantity*), without any difference in the *time*, *measure*, or *rhythmus* of the tune. If this same tune is to be played faster, the length of the bars must be measured by a shorter pendulum; and if to be played slower, by a longer pendulum.

The foregoing specimen is of the genus of *common time*, where the *cadences* or *pulses* are divisible by the even number two. The following example is of the other genus, called *triple time* (or *measure*); because the *cadences*, or metres between the *pulses*, are divisible by the odd number three. In this example the modulation and harmony shall be the same as in the former; but the melody will be different by the change of the *rhythmus*, or *measure*, or *time*.





Page 312. " — In the harpsichord, the notes are all of the
 " same length, without the distinction of long or short; — nor
 " has it what is properly called *time*, but its whole music is a
 " jingle of sounds differing in acuteness and gravity, and diver-
 " sified by different pauses and stops, or different degrees of
 " quickness and slowness."

R E M A R K.

The notes of the harpsichord and of all pulsatile instruments have the same allowance made for the duration of their tones, that instruments sounded by the bow, or by inspiration, have. For though in the harpsichord, the loudness of the tone, from the first moment of percussion, diminishes very fast, nevertheless it is still sounding, and the player is, by rule, obliged to keep the finger on the key, corresponding with each note, during the length of time which that note should continue; for the instant the finger is removed, by the construction of the instrument, a damper falls on the string and stops the farther vibration. And moreover, the harpsichord being contrived for playing, at once, several different parts in harmony, is much more capable of keeping

keeping the player in true time, than any single instrument, such as flute or violin; for, as in the two last preceding examples, whilst the treble in the first bar consists only of one continued sound, the same bar in the bass is so sub-divided as to shew exactly how long the single sound of the treble is to be continued.

Page 313. “ — Long and short — and this is the fifth and
 “ last species of rhythm. For if the mind perceives any ratio
 “ betwixt sounds, with respect to their length and shortness,
 “ then it has the idea of this kind of rhythm, which, in music,
 “ is commonly called *time*; but in language the ancient authors
 “ call it by the name of the genus, *rhythm*; whereas in modern
 “ authors, it is commonly distinguished by the name of
 “ *quantity*.”

R E M A R K.

RHYTHMUS is a general term, and is divided into *two general modes of time, common and triple*; each of which is sub-divided into specific differences of *faster and slower*; consisting of cadences whose metres may be uniform or *mixed, even or pointed*. The diversities of *uniform or mixed, even or pointed*, arise from the different manners of subdividing and disposing the *quantities* contained in the whole of each cadence or bar.

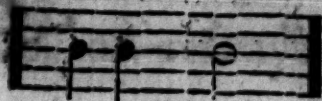
QUANTITY, or duration of sounds, distinguished by *longer and shorter*, is subservient to the cadences of rhythmus, as fractional or aliquot parts are to integers; and it is the business of *metre* to adjust the *quantity* of notes or syllables contained in each *cadence or bar*; *rhythmus* is to keep, by its *pulsation*, all the
 cadences

cadences of an equal length. *Long* and *short* notes or syllables are the common component parts of all metres of all *cadences* under all kinds and species of *rhythmus*; that is, each *cadence* under any species of either of the general modes may be metrically sub-divided into fractional or aliquot parts.

As this *cadence* of common time,



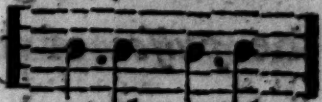
may be sub-divided uniformly into



or thus, the two genera of common and triple measure may be mixed,



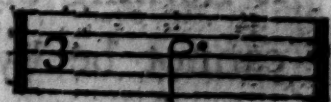
or thus, pointed,



or thus, even,



or any other way, so that the fractions, being aliquot parts, shall altogether make up the whole quantity of the *bar* or *cadence*. And in the like manner, this bar or cadence of triple measure,



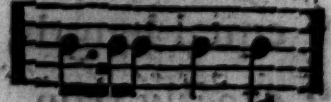
may be uniformly divided into



or, by dividing it into two equal parts, the two genera are virtually mixed,



or thus, into a pointed metre,



or thus, even,



Even and *uniform* are the same, but are considered under these two different terms, in respect of the *metres* to which they are opposed, *mixed metre*, and *pointed metre*.

Page 313 and 314. " Now all motion is either interrupted
 " by *pauses* or *intervals*, or it is without such interruption. If it
 " be interrupted, either the *intervals* are greater or less, or the
 " distances between the *intervals* are greater or less. And hence
 " arise the two first kinds of *rhythm* I mentioned, belonging to
 " the *intervals* of sound."

R E M A R K.

The *intervals* or *pauses* between sounds do not necessarily constitute any regular distinction of *rhythm*, or *modes of time*: for the *pulses* of *cadence*, as well as its sub-divisions of *heavy* and *light*, are to be counted on in the mind, during the *pauses* or *intervals*, as well as during the continuation of sound. (See the several examples in this treatise.)

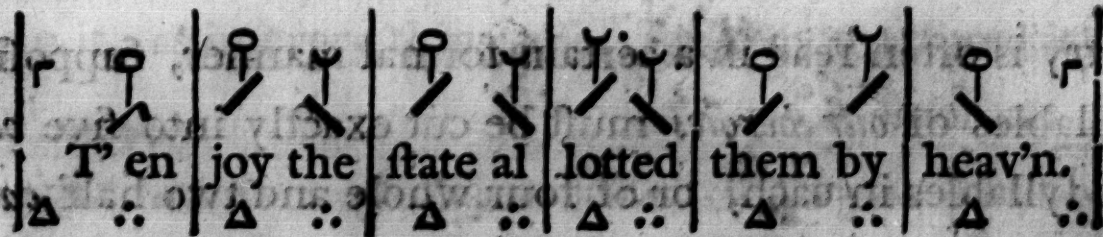
Page 318. " — Here, as in accents, or notes of music, there
 " is nothing absolute, but all is relative; for there is not, nor
 " cannot be by nature, any fixed standard for the length or
 " shortness of syllables. All therefore that art can do, is to
 " ascertain the ratio that a long syllable has to a short. And this
 " the grammarians have fixed to be as two to one. And thus all
 " syllables in Greek and Latin, compared together, are either of
 " equal length, or in the ratio of two to one. It is not, however,
 " exactly true, that all short syllables are of equal length, or all
 " long; but some short syllables are shorter than others likewise
 " short, and some long syllables longer than others. But in the
 " metrical art, this difference is not attended to, and all the
 " short

“ short syllables are held to be equal to one another, and all the
“ long.”

R E M A R K.

We have *standards* both for *accent* or *quantity*; as thus, for *accent*; bring two voices, or two instruments, or any two sounds, into *unison* with each other, — that *unison* is taken as a *standard* or *key note*; from which, either upward or downward, all relative sounds are measured by our scale, with accuracy. As a *standard* for *rhythm* by *cadences*, and their sub-divisions in *quantities*, we have the *pendulum*, or the *human step*, instead of the pendulum.

In our treatise, we have marked out a more accurate proportion between longer and shorter syllables than that recommended by our Greek masters; and we have shewn the necessity of it in *our language*, more especially in *our poetry*. For if the rhythmical and metrical rules, as there laid down, are attended to, there will be little or no occasion for clipping off syllables in any good poetry, which our best authors have hitherto practised, though, as I think, needlessly. For example:



Why not write these two hexameters thus?



Each line is still measured by six bars or *rhythmical cadences*, and the syllables, now restored, are provided for, without injuring the metre of the *cadences*, by subdividing their *quantities* into as many aliquot parts (not exceeding the integer of each *cadence*) as are required for expressing the recovered syllables, within the time of the *bar* or *cadence* under which they fall.

Page 326. "— Our verse made by accent and not by quantity. — Take for example the first verse of the *Paradise Lost*; Of man's first disobedience, and the fruit. Here the five accented syllables are, *man's, dis, be, and, fruit.*"

REMARK.

Poetry is often read in a certain formal manner, supposing the ten syllables of our *heroics* must be cut exactly into five *cadences* of two syllables in each, or of four whole and two half *cadences*; whereas they always require the time of six *cadences* at least; but those

those who have only the idea of five *cadences*, seldom attend to the necessary *rests* or *pauses*, or to a nice *metrical* sub-division of the *cadences* according to the natural and necessary *emphasis* (or *poize**) and *quantity* of each syllable; and therefore frequently misplace the *light* and the *heavy*.

To give the proper expression to the first lines of *Milton's Paradise Lost*, I humbly conceive, they should be noted thus.

3 Of man's first disobedience, and the fruit of that forbidden tree, whose mortal taste brought death into the world and all our woe; sing, heavenly Muse.

Page 316. "I shall say nothing further of this musical rhythm, except to observe, that the ancients were very accurate in it, as in every thing else; for they measured it by feet,

* I shall take the liberty for the future to appropriate this word *poize* as a common term for the *Δ* heavy and the *∴* light, as *accent* is for *acute* and *grave*, and *quantity* for *long* and *short*.

“as they did the rhythm of their language, and had dactyls
 “and spondees, and the like in their music, as well as in their
 “poetry.”

R E M A R K.

As I consider our sense of *rhythmus* to be much more *instinctive* than *rational*, I am of opinion, that the ancient Greeks might have been practically as excellent in that part of music, as the moderns; but, from any thing I have read, I cannot think they had so accurate a manner, of describing or noting it, as we have. Their distinctions, by various feet, compared with our musical *rhythmus*, seem, many of them, only serving to puzzle, without any real difference as to measure. Our rules, which reduce all the possible species to two genera, are obviously more excellent, because more simple; of which I have given some examples in the foregoing treatise.

I am of opinion, that no language was ever spoken under so confined a proportion of *quantities* as two and one, for the *long* and the *short*; and yet those commentators, who hint at a greater latitude, have mentioned no rule of proportion except the two and one: neither have they left us any sufficient or satisfactory rules for *rests* or *pauses*, without which neither poetry or prose can be graceful or just in its expression.

Aristides, it is true, says, *κενὸς μὲν ἔν ἐστὶ χρόνος*, lib. I. p. 40.; that is, “There is a vacant or *silent time*, which is left without any sound
 “to compleat the *rhythmus*. The *shortest silent time* in *rhythmus* is
 “called *leimma* or a remnant; and a *long silent time*, double to
 “the short, is called *prosthesis* or an addition.” And he had said
 just before, “That where in the *rhythmus* of mixed feet, a foot
 “happened

“happened to be insufficient to fill the *metre*, the vacancy was to be supplied by a *silence*, either of a *leimma* or of a *prosthesis*.”

This, however, is all he says of it: though, as it agrees perfectly with my system, it is sufficient to convince me, that the accidents of *rhythmus* belonging to our language, were also the same to the Greek. But as those grammarians who composed the rules of prosody now in use, have made no rules or allowances at all for *rests* or *silences*, it is to be presumed it was not intelligible to them, or they would never have omitted so material a part, both of *rhythmus* and *metre*. And further it is plain, that determining Greek and Latin heroics, such as the Iliad and Æneid, to be hexameter lines, excludes *rhythmical pauses* altogether.

For example, to set the first four lines of the Æneid in our notes, strictly according to the Latin prosody, they will be thus, in common time:

Arma vi rumque ca no Tro jae qui primus ab oris.

Ita li am, fa to profu gus, La vinaque venit

Litora; mult' il l' et ter ris jac tatus et alto

Vi supe rum, fœ vœ memo rem Ju nonis op iram.

Here

There is no room for variety of metre, nor a moment's pause even for breathing, each line being strictly confined to the six *metres* or *cadences* *. But if I could meet with a living Virgil, I should ask him, why these lines might not be set in the following manner, in triple measure, still preserving the *long* and the *short* syllables, but with an extended variety of *long* and *longer*, *short* and *shorter*, and also with the proportion of *triples* and *thirds* as well as of *doubles* and *halves* ? And if he gave me a better reason why they should not, than either the grammarians or the commentators have done, I would certainly submit to him, and copy his manner of pronouncing exactly, in *accent* as well as quantity, which would most probably be quite new to all Europe.

Arma vi rumque ca no, Tro jae qui primus ab oris

I ta li am, fa to pro fu gus, La vi na que ve nit

* I have set the lines above, according to their quantities prescribed by the rules of prosody; but it is fit I should also shew them as they are generally scanded in our schools; where, by making the last syllable of the dactyl longer than the first (in direct contradiction to the real quantities), they turn dactyls into anapests.

Ar ma vi rumque ca no Tro jae qui primus ab or is.



In this manner, the *multum ille* and the *ille et* are pronounced without any *elision*, and without any injury either to the *rhythmus* or to the *metre*, the *cadences* being all *dactylic*, under which title *spondee* is legally included. And with the addition of necessary rests for breathing time, and for stops of *expression**, these lines are *octometres* instead of *hexameters*.

It is proper I should say something for the liberty I have taken here, in varying the proportions of the syllables in the *dactyl*.

It is notorious, that this foot is so called from *dactylus*, a *finger*; because, as Isidorus says (De Gram. lib. I. c. 16.), "It begins from the longer joint, and ends in two short ones." It is certain the longest member of a finger is about equal in length to the two shorter; but it is also certain, that the lengths of the bones of the three joints of a finger are nearly in proportion to each other, as three, two, and one; consequently, three,

* I would explain myself here by a better word, if I could find one; but if a *pause* or *silence*, fitly employed, makes a significant impression on an auditor, it may be admitted as an expression in the speaker.

the longest, is equal to the sum of two and one (the two shorter) added together. Now though I do not say there is, to my knowledge, any natural or necessary analogy between the proportions of our members and the measures of our words; yet, as *Aristides* says (δάκτυλος μὲν ἐν ἐκλήθην, &c. lib. I. p. 36.), "It is called *daetylus*, because the order of its syllables is analogous to the "parts of a finger;" and the proportions I give the syllables in the *daetyl* according to my alteration, being agreeable to *Aristides*'s definition, I might stand upon this, as my authority. But it does not appear, the Greeks had any method of notation which set the *daetyl* in that order; and therefore I do acknowledge, I had no other authority for what I have done, than the judgment of my own ear, in estimating the *quantity* of syllables, and the *euphony* of language. I have taken the same liberty with the *anapest* or *anti-daetyl*; and sometimes, under the same judgment, have put them both as the Greeks did.

I will set a few lines of the *Iliad* in like manner.

3 | Mḥνιν ᾗ | εἶδε, Θε ᾗ, | Πη | λη ἰ ᾗ δε | ὦ Ἀχι | λῆος |
 Δ ... Δ ... Δ ... Δ ... Δ ... Δ ... Δ ... Δ ...

or, | λη ἰ ᾗ | δε ὦ Ἀχι | λῆος |
 Δ ... Δ ... Δ ... Δ ... Δ ... Δ ...

Οὐλομέ νην, ἦ μυρί' Ἀ χαιοῖς ἄλγε' ἔ θηκε·

Πολλὰς δ' ἰφθί μιν ψυ χὰς ἄϊ δι' ὠροί' ἀψεν

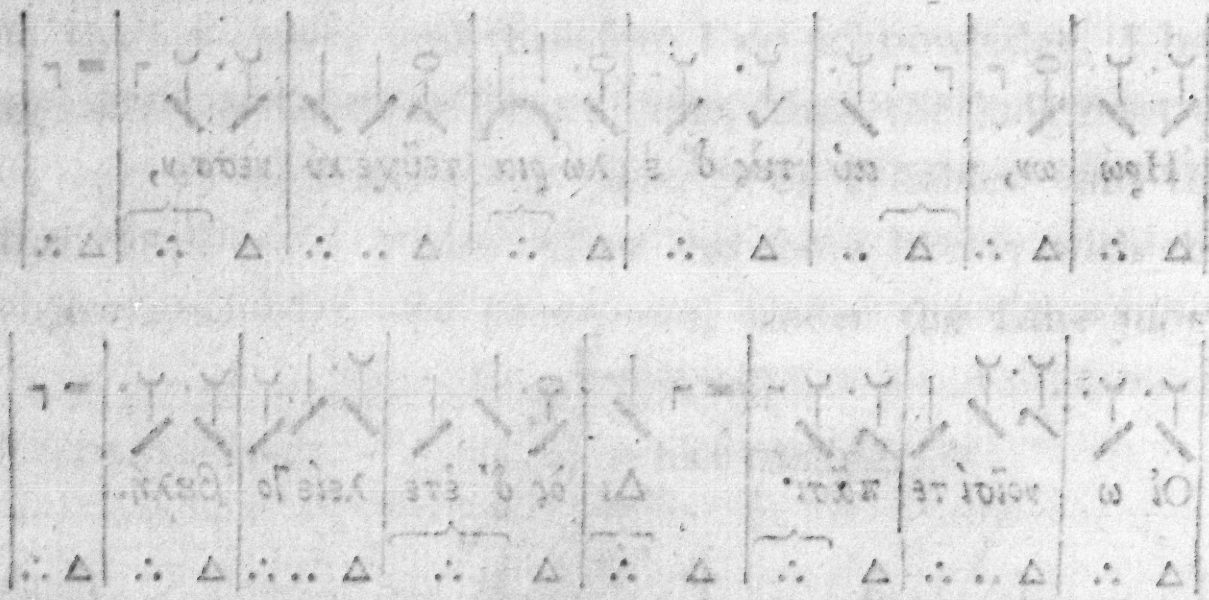
Ἡρώ ων, αὐ τὰς δ' ἐ λώ ρια τεύχε κύ νεσσιν,

Οἱ ω νοῖσί τε παῖσι· Δι' ὅς δ' ἔτε λείετο βελή.

In setting these lines, I have followed authorities as far as I could find them; the rest I must take upon myself. We have Eustathius's authority for the two manners of disposing of the extraordinary syllable in Πηληϊάδεω; in either of which ways, he says, "the tetrasyllable is to be considered only as a dactyl." However, it was strictly, in either way, a pæon, either a first or a second; and was a point of dispute among commentators: in our method it admits of no difficulty, whether it be tetra-

syllable or trisyllable; in either way it is accommodated to the time of our cadence.

I think, from the examples I have given in the three languages, it may be inferred, either that the Greek and Latin poetry had not so regular a *rhythmus*, such even *metres* (that is, *cadences*), nor so great a variety in their *quantities*, as our language has; or that the ancient grammarians did not write the laws of their prosody up to the genius of those learned languages; or that the rules of that art have been transmitted to us in a very imperfect state.



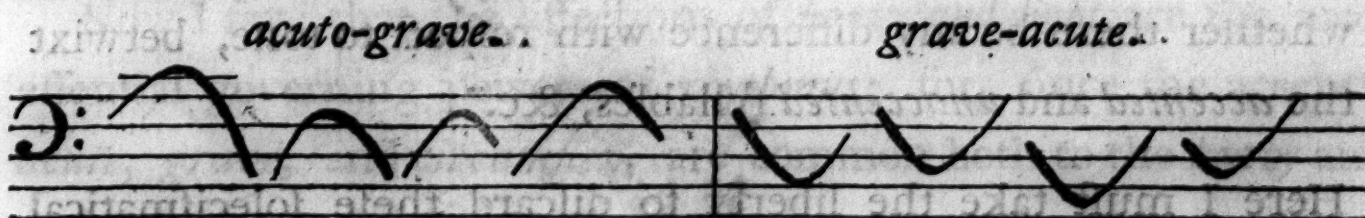
In setting these lines, I have followed authorities as far as I could find them; the rest I must take upon myself. We have Erasmus's authority for the two manners of disposing of the extraordinary syllable in Hexameter; in either of which ways, he says, "the extraordinary syllable is to be considered only as a dactyl." However, it was strictly, in either way, a prosod, either a first or a second; and was a point of dispute among commentators: in our method it admits of no difficulty, whether it be considered as a syllable.

SOME

SOME FARTHER EXPLANATIONS, IN ANSWER
TO THE REMARKS AND QUERIES MADE BY THE AUTHOR
OF THE ORIGIN AND PROGRESS OF LANGUAGE.

† See Observations, } THE extent and form of circumflexes;
page 57, § 1. } are very various in our language;
two or three quarter tones more or
less make little difference in the sense of their application. By
the rules I have given, and the examples under them, I do not
mean to give models of pronunciation; but to shew how any
particular pronunciation may be fixed in characters, and trans-
mitted to posterity.

I suppose there are as many different circumflexes as there are
different tempers and features in men; to save words, I will
exemplify some by notes: .



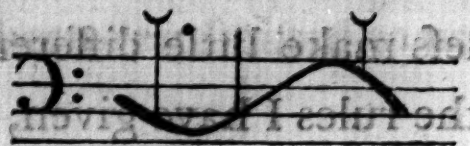
The circumflexes, *acuto-grave*, are characteristic of the Irish
tone; and the circumflexes, *grave-acute*, are characteristic of
the Scottish tone.

The dialectic tone of the court and other polite circles rises
but little above a whisper, and may be compared to that species
of painting, called *The Chiaro Oscuro*, which is denied the
vivacity of expression by variety of colours. There, the cir-
cumflex, though it cannot be left out of the language, is used
within very narrow limits: frequently not rising or falling above

five quarters of a tone, and for the most part hurried over with great velocity, in the time of a quaver, or shortest note.

But, in the Court language, there is no argument; for in the Senate, and where that is used, the extent of the slides are enlarged to the extreme, though the circumflex is never so apparent as in the provincial tones.

Example of a familiar English interjection, used when a person is convinced by the relation of some new circumstance not mentioned in the argument before. The whole extent of this interjective circumflex, between acute and grave, does not exceed 17 quarter tones (exclusive); whereas in some of our provincial dialects, the expression on a similar occasion would run to an extent of 29 or 30.



† See page 58. § 2. “ But still it remains to be considered, “ whether there be any difference with respect to tone, betwixt “ the *accented* and *unaccented* syllables, &c.”

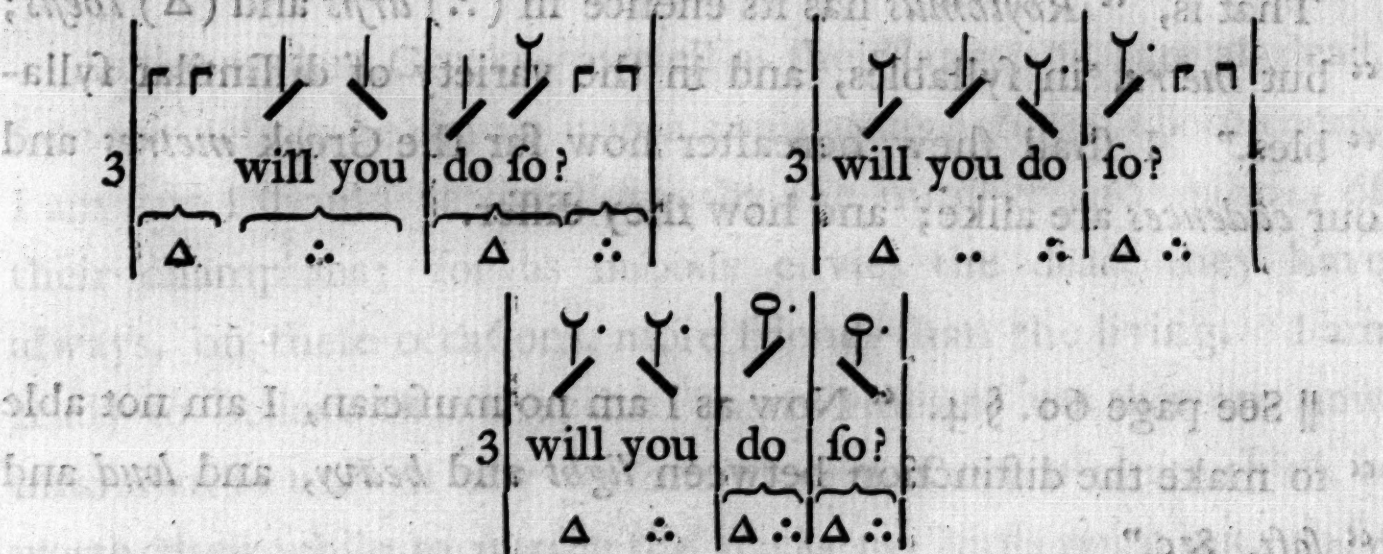
Here I must take the liberty to discard these solecismatical terms of *accented* and *unaccented*, as they are notoriously repugnant to what we mean to express; and, in their stead, to use the terms of *heavy* and *light*.

Then it is evident, from the several examples I have given, that in English the *heavy syllable* has sometimes the *grave accent*, though oftener the *acute*; and that the *light syllable* has sometimes the *acute accent*, though oftener the *grave*.

In

In our language, generally, the last syllable of any imperfect sentence (while the attention is to be kept up, for the sense of the whole, yet in suspense,) ends in the *acute*; and all complete periods end in the *grave*.

Questions, though in the same words, are sometimes simple, and sometimes tacitly implying a threat, or some condition, not otherways expressed than by *accent* and *emphasis*. As for example,



Now I say, that the affections of *heavy* and *light* are the most essential governing powers of *rhythmus*; for, since the accents, *acute*, *grave*, and *circumflex*, are common both to the *heavy* and to the *light*;

And since quantity, or the *long* and the *short*, are likewise common to each;

And since the accidents of *loud* and *soft* are also common to each;

And lastly, since the accidents of *accent*, *loudness*, and *quantity*, occur not periodically, but occasionally, whilst *cadence* is strictly *periodical*, and divided into *heavy* and *light* alternately; which affections are to be accounted for in the mind, whether *sounding* or *pausing*, continued or articulated,

It follows, that *heavy* and *light* (as the certain alternate division of cadence) are the most essential governing powers of *rhythmus* both in poetry and prose.

The same thing, viz. *heavy* and *light*, which govern *rhythmus* in our language, governed it also in the Greek: for Aristides says, τὸν μὲν ῥυθμὸν ἐν ἄρσει καὶ θέσει τὴν ὑσίαν ἔχειν τὸ δὲ μέτρον ἐν συλλαβαῖς, καὶ τῇ τάττων ἀνομοιότητι. (Meib. vol. II. p. 49.)

That is, “*Rhythmus* has its essence in (∴) *arsis* and (Δ) *thesis*; “but *metre*, in syllables, and in the variety of dissimilar syllables.” I shall shew hereafter how far the Greek *metres* and our *cadences* are alike; and how they differ.

|| See page 60. § 4. “Now as I am no musician, I am not able “to make the distinction between *light* and *heavy*, and *loud* and “*soft*, &c.”

I have made several remarks, and have given musical examples, in order to distinguish clearly the difference between *heavy* and *loud*, and between *light* and *soft*, which I will endeavour to illustrate further by a familiar example, in two words.

Suppose a man speaking to his mistress in the words, “MY “DEAR!” *Dear* being, in this place, put substantively, is absolutely affected to the *heavy*; therefore those words must be noted to be pronounced thus, “MY | DEAR.” Suppose the conversation
∴ Δ
to have begun in the ordinary degree of loudness, and at the instant he has pronounced *My*, a person appears in sight, who ought not to hear the next syllable, the speaker can instantly
soften

soften his voice, even to a whisper, though still the word will carry its proper emphasis, and remain *heavy*; so that to write those two words, as directory to an actor, they should be noted thus,

LETTER FROM THE AUTHOR OF THE ORIGIN AND
PROGRESS OF LANGUAGE TO THE AUTHOR OF THE
TREATISE ON THE MEASURE AND
SPEECH.
MY DEAR!
∴ ∆
; ;
forte. piano.

As the ancient Greeks, as well as their language, are all dead, I do not wish to be drawn into a comparative contest about them. I am sure I should be overborne by the number and abilities of their champions; for as nobody envies the dead, they have always, on these occasions, more friends than the living. I am ready to believe that they had many rules of art that are now unknown to us. If any persons of genius and assiduity think it worth their while to pursue the tracks my hints point out, they will perhaps find, that the just rules of melody and measure are as natively applicable to our language as to the Greek; though, from our too frequent terminations on mute consonants, and on the letters S and M, our language is far less melodious than theirs, and infinitely inferior, in that respect, to the modern Italian.

"of which I beg that you would accept of a copy, that I may
order to be delivered to you; and if you will take the trouble
to read it, and suggest to me your observations, I may profit
as much by my errors in it, as I have done by those in the
second volume.

"I have made some observations upon the valuable papers
you have sent me, and proposed some doubts that still remain
N LETTER

LETTER FROM THE AUTHOR OF THE ORIGIN AND
PROGRESS OF LANGUAGE TO THE AUTHOR OF THE
TREATISE ON THE MELODY AND MEASURE OF
SPEECH.

“ April 6, 1775.

“ I COULD not delay longer acknowledging the favour of
“ your very polite and obliging letter, and thanking you most
“ heartily for the attention you have been pleased to bestow upon
“ my work, and the excellent observations you have made upon
“ it. It was chiefly with a view to set such men as you a
“ thinking upon such subjects, that seemed to me new and
“ curious, and to learn their thoughts upon them, that I came
“ to the resolution of publishing; and it has answered as to both
“ volumes. For upon the first, I have got so many observations
“ from different hands, as have enabled me to make a much
“ larger, and, I think, a better book of it in the second edition,
“ of which I beg that you would accept of a copy, that I will
“ order to be delivered to you; and if you will take the trouble
“ to read it, and suggest to me your observations, I may profit
“ as much by my errors in it, as I have done by those in the
“ second volume.

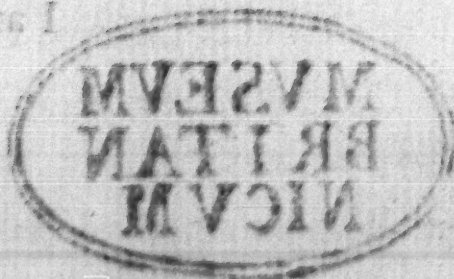
“ I have made some observations upon the valuable papers
“ you have sent me, and proposed some doubts that still remain
“ with

“ with me. * * * * The whole is exceedingly ingenious, and
 “ by the notation you have invented may be made very use-
 “ ful; particularly that part of it which marks the highest
 “ pitch of tone that the best speakers rise to in declama-
 “ tion without canting. To distinguish these two exactly is, I
 “ believe, a matter of great nicety, and what, I believe, some
 “ * * * * are not well able to do. And
 “ one particularly * * * * , I heard Mr. G— men-
 “ tion; who, he said, when he reasoned, pronounced better
 “ than any body; but when he declaimed, fell into an abomi-
 “ nable cant.

“ What you have said of the pauses too, I think, may be of
 “ great use; for they certainly ought to be in just proportion to
 “ what is spoken, otherwise the speech can never be truly grace-
 “ ful and harmonious.

“ I am very glad to hear from our worthy friend Sir John that
 “ your experiment upon Mr. Garrick’s declamation succeeded so
 “ well. Actors are the only artists that cannot eternize them-
 “ selves by their works; but you have fallen upon a way to
 “ make Garrick live as long as his Shakespear.

“ I am, &c.”



TO THE AUTHOR OF THE ORIGIN AND PROGRESS OF
LANGUAGE.

April —, 1775.

I AM favoured with your l—p's very obliging letter of the 6th instant, together with the two volumes; for which be pleased to accept my thanks.

A rumour of the subject of my little treatise having spread much farther than I could have imagined, * * * * I have laid aside my intention of privately printing some copies, and have committed it to the public press. Lord — told me, he had heard of it at Geneva. * * * * I must beg your l—p's liberty to publish your paper of queries and observations, on which my last explanations were founded, as it will save me much trouble, and clear up the system much better than it could be done without it. I hope your l—p's next queries will come in time, so that my answers to them may be able to compleat the whole. * * * Nothing can tend so much to elucidate any subject as the queries of an ingenious doubter.

I am, &c.



OT

TO

TO THE AUTHOR OF THE TREATISE ON THE MELODY
AND MEASURE OF SPEECH.

" May 14, 1775.

" **Y**OU have inclosed my remarks, which are too long; but:
" as you desired them soon, I had not time to make them
" shorter. I am glad that you are to give your system to the
" public. * * * * * As to the queries and observations I sent
" you formerly, and have now sent you, you may make what
" use of them you think proper; and if they contribute in the
" least to make more compleat so ingenious a performance, I
" shall think they do me honour.

" I am, &c."

SECOND

§ 2. " Secondly,

SECOND SET OF OBSERVATIONS AND QUERIES BY
THE AUTHOR OF THE ORIGIN AND PROGRESS OF
LANGUAGE.

“ I WILL begin with stating those things in which we agree,
“ or rather those things which I have learned from you; and
“ then I will beg leave to propose some doubts that still remain
“ with me; but which you may be able to solve, as you have
“ done some of those I have already stated.

§ 1. “ And in the first place, I am convinced that there is a
“ natural propensity in the human mind to apply number and
“ measure to every thing we hear; and indeed to every thing,
“ as it is a necessary operation of intellect, being that by which
“ intellect creates to itself its proper objects. For, though sense
“ perceives things indiscriminately, and as it were in the lump,
“ intellect apprehends nothing that is not reduced to number,
“ measure, or order of some kind or another. And as this pro-
“ pensity of the mind is previous to any opinion or determination
“ of the will, I think, you properly enough call it *instinctive*.
“ This is undoubtedly the foundation of all rhythm; and as I
“ have pretended to go to the bottom of things, and have for
“ that reason taken a compass, which others, I know, as well as
“ you, think too great, I ought certainly to have taken notice of
“ what is the natural principle of all rhythm.

§ 2. “ Secondly,

§ 2. " Secondly, I am therefore of opinion, that we cannot
 " listen attentively, for any considerable time, to any sound,
 " whether musical or not, without endeavouring to apply some
 " measure to it, and to divide it into parts equal, or that have
 " some other ratio to one another. For if we consider it only as
 " continued, and without division, we have no idea of number or
 " measure; for, as Cicero says, *Numerus in continuatione nullus*
 " *est: distinctio, et equalium et saepe variorum intervallorum per-*
 " *cussio, numerum conficit.* But the question is, how do we divide
 " it? and what measure do we apply to it? To which I think it
 " may be answered in general, that it must be some pre-con-
 " ceived standard, or measure, of which we have formed an
 " idea, and which we have been in use to apply to other things:
 " thus we measure time by the usual standard of hours, half-
 " hours, quarters, and minutes; and it is surprizing how accu-
 " rately some persons will do this, merely from the idea they
 " have in their mind of those measures, especially such as are
 " not in use to consult clocks or watches. There are also other
 " ways of measuring time, such as that which Horatio, in
 " *Hamlet*, mentions, when he says, that the ghost staid with
 " them, while one, with moderate haste, could count a hundred.
 " But this, and every other way that can be imagined, of mea-
 " suring time, must necessarily refer to some pre-conceived
 " standard.

§ 3. " Thirdly, To apply this to music, I am now fully con-
 " vinced, that every man, who considers a piece of music
 " attentively, and with any degree of knowledge of the art,
 " must necessarily divide it into parts, greater or smaller; and
 " particularly

“ particularly into *bars*, which is a measure by which every tune
 “ is divided into equal parts. And I am also convinced, both
 “ from the reason of the thing, and the experience of my ear,
 “ that the note which begins each bar, and which you call the
 “ *heavy note*, is not necessarily either a loud or a soft note, a high
 “ or a low, a long or a short note; nor does it appear to me to
 “ have really any pulsation or ictus, except what the mind may
 “ suppose it to have, when it makes it the leading note of the
 “ bar. But here I am at a loss to know how the * length is
 “ determined of these equal portions into which the mind is
 “ pleased to divide the tune. Why are they not greater? or
 “ why are they not less? To what pre-conceived standard does
 “ the mind refer in this division? It may be my total ignorance
 “ of the practice of music, that makes me have this doubt; but
 “ if you think you can satisfy me with little trouble, I hope you
 “ will be so good as to do it. In the mean time I would beg
 “ leave to suggest that of all the motions which you have men-
 “ tioned, as a natural standard for the measure of a bar, the step
 “ and pace appear to me the aptest; and where the bar consists
 “ of two notes, a light and a heavy; or of four, *viz.* two heavy
 “ and two light, the movement appears to me to be very like a
 “ step, or two steps, in ordinary walking. † But I observe, that
 “ the mind naturally divides some tunes, particularly Scotch
 “ tunes, into many more notes, which are all connected toge-
 “ ther by one pulsation, real or supposed, and so make one bar.
 “ There I find it difficult to resolve the bar into steps or paces,

* This and the following marks refer to the answers hereafter given to these particular parts.

“ whether of a found or a lame man; and I should think, that
 “ in such a case the mind fixed upon some measure, suitable
 “ indeed to the genius of the tune, but such as has no standard
 “ in nature.

§ 4. “ I am convinced, that the ancient music must have been
 “ divided, as well as the modern, into bars; and that the *arsis*
 “ and *thesis*, of which they speak so much, must have referred
 “ to such a division.
 “ I am obliged to you for your observation upon the inaccu-
 “ racy of my expression, with respect to the harpsichord. If I
 “ had said, that there is no difference of length in the notes,
 “ while they continued invariably the same; that is, with the
 “ same degree of intenseness without dying away, I believe it
 “ would have been the truth; but I have expressed the thing too
 “ generally. I might have added further, in dispraise of the
 “ harpsichord, that it is incapable of what I think a very great
 “ beauty in music, and that to which it owes a great part of its
 “ expression, I mean the swelling of the note. But though I
 “ think it be not a pleasant music in itself, it is most useful for
 “ the purpose you mention, of keeping a concert in time.

§ 5. “ As to what I have said of *time* in the passage you
 “ mention, I do not speak there of the time of music in parti-
 “ cular; but I should think, that the duration of any sound may
 “ be called its *time*. I believe, indeed, musicians do not call
 “ the length or shortness of the particular notes, compared with
 “ one another, the *time of a tune*; but the length or shortness
 “ of syllables is, in the language of those who treat of the
 “ metrical art, the time of the syllables. In the language of

“ music, I observe, that the word is used in a sense a good deal
 “ different from its natural and proper signification; for, instead
 “ of denoting the duration of the movement, it denotes the
 “ nature of it, according to the division which you have made of
 “ it into *common* and *triple* time.

“ This is all I have to observe upon your music; in which if
 “ I did really differ from you, I should be ashamed to own it.
 “ As to language, your intention appears to be, to apply to it
 “ the rules of musical rhythm, and particularly to divide it into
 “ bars, without distinction, whether the syllable beginning the bar
 “ be a long or a short syllable, loud or soft, or whether the tone
 “ of it be high or low; and you compute the pauses, which the
 “ sense requires, to make part of the bars. It is, I think, a
 “ noble attempt; for as musical rhythm is exact and regular,
 “ being reduced to rule, and comprehended in the art; if we
 “ could apply it to speech, we should certainly measure it more
 “ exactly, and make it more truly rhythmical and numerous.
 “ That it may be done, at least in some degree, and that it will
 “ have this effect, I have little doubt; but that it hitherto has not
 “ been done, not even in the learned languages; and that it has
 “ been as yet made no part of either the grammatical or rhetorical
 “ art, I think I can take upon me to aver with some confidence.

“ For as to the learned languages, and particularly the Greek,
 “ which was by far the most learned of the two, I mean the
 “ language of greater art, there are two things belonging to
 “ composition in that language, which their critics have distin-
 “ guished accurately, not jumbled together as modern authors
 “ have

“ have done under the name of *profody* ^(a); I mean melody and
 “ rhythm. The first is, that music which was produced by
 “ the proper mixture of grave and acute tones in their language,
 “ so as to have a pleasing effect on the ear. The other arose
 “ from the combination of long and short syllables in what they
 “ called *feet*, by which they made their prose, as well as their
 “ verse, numerous, so as to affect the ear wonderfully, according
 “ to the description they give of it.

§ 6. “ As to their melody, you have convinced me that I was
 “ in an error, when I supposed that the acute accent rose at once
 “ to a fifth upon one syllable, and fell down again precipitately
 “ upon the next. I now see clearly, both from the reason of
 “ the thing, and from authorities which I myself had collected,
 “ but not well understood, that their voice in speaking was
 “ never at rest as in music, but was constantly sliding up and
 “ down, and was only at the highest upon the acuted or circum-
 “ flected syllable; after which it fell gradually, till it rose again
 “ to the same pitch upon the next acuted or circumflected
 “ syllable. But I have some doubt, whether upon every grave
 “ syllable they began acute and ended grave. I rather incline
 “ to think, that upon the syllable next following the acute,
 “ the voice would begin to fall †, and continue falling upon that,
 “ and perhaps upon the next after that, till it came within a
 “ syllable or two of the next acuted syllable, and then it would
 “ begin to rise gradually, till it arrived at its height upon that
 “ syllable. This seems to me to be the *ῥυθμὸς*, or *flow*, of the
 “ melody of speech mentioned by the ancient grammarians and

(a) See what I have said upon this subject, vol. II. p. 271. 275. and 382.

“ musicians. But I shall be very glad to be further instructed by
 “ you upon this subject.”

§. 7. “ Before I leave this subject, I must repeat an observa-
 “ tion I have elsewhere made ^(b), that when I speak of the accents
 “ or tones of the Greek language, I mean only syllabical tones,
 “ which were appropriated to particular syllables of each word,
 “ according to certain rules delivered by the grammarians; not
 “ the tones of passion or sentiment, which did not belong to
 “ syllables, but to words and whole sentences. These made a
 “ principal part of the player’s art, which was much studied,
 “ and in great reputation among them. But whatever the tone
 “ was that passion or sentiment dictated, the accents or syllabic
 “ tones were still observed as an essential part of the grammar of
 “ the language. As to the variety of loud or soft, it must have
 “ been in their language, as well as in ours; but it was not affected
 “ to syllables ||, as with us, but belonged to words or sentences.”

§ 8. “ As to what they called the rhythm of their language,
 “ which was composed of the quantity of syllables, you seem to
 “ think, that the respective length of their syllables was not
 “ sufficiently fixed; and that the long syllable was not to the
 “ short as two to one. And that it often was the case, that the
 “ long was not exactly in that ratio to the short, is certainly true;
 “ and we are so told by their grammarians and critics. But then
 “ you are to consider, that the length or shortness is properly in
 “ the vowel, on the vocal sound, not in the consonants with
 “ which it was enounced. Now it is laid down, by all the
 “ writers upon the metrical art, and I have always held it to be a

(b) Vol. II. p. 277.

“ rule that suffered no exception, that a long vowel was to a
 “ short as two to one. By the consonants indeed, either pre-
 “ fixed or following the vowel, the pronunciation of it will be
 “ so much retarded, as to make a long vowel longer; and if two
 “ consonants follow after it, they will, you know, make a short
 “ vowel long; or, to speak more properly, the syllable long.
 “ But the preceding consonants, and even a single consonant
 “ following, though they no doubt varied the quantity a little,
 “ yet that passed for nothing; and all hexameter verses were
 “ reckoned of the same length, though some of them necessarily
 “ must have been in reality longer than others. For you know,
 “ that there are many things in all arts, even in music, which I
 “ hold to be a more perfect art than language in this matter of
 “ rhythm, which affect the senses, and yet are not reduced to
 “ rule, and perhaps, by their nature, cannot be reduced to
 “ rule.

“ It is by these feet that the ancients divided the continuity
 “ both of their verse and prose. These, if you please, you may
 “ call *bars*, and I think they would be properly so called; because
 “ I am persuaded, the beginning of them was marked, at least
 “ in their poetry, by the *supplasio pedis*, and from thence, as you
 “ very ingeniously observe, they had their name. But there
 “ was this difference betwixt those bars and such as we have, and
 “ I believe they had, in music, that they did not divide the
 “ speech equally, except in certain kinds of verse, such as
 “ hexameter; but on the contrary, the variety of feet of
 “ different times was reckoned a beauty in their prose compo-
 “ sition. That they had no other division or measure of the
 “ rhythm

“ rhythm of their language than these feet, or bars, if you
 “ please to call them so, I think, is certain; otherwise, I think,
 “ it is impossible but such writers as Aristotle and the Halicar-
 “ nassian, who have all treated fully of the rhythm and numbers
 “ of their language, would have mentioned it.

“ As to the pauses or rests which the sense require, I under-
 “ stand they treat of them when they speak of the various
 “ lengths of periods, and their several members. But it seems
 “ they did not reckon silence any part of the rhythm of lan-
 “ guage, though, I think, it may be very properly so considered
 “ in language as well as in music: and I am convinced, that no
 “ language, whether prose or verse, can be agreeable to the ear,
 “ if pauses are not properly adjusted and commensurated to the
 “ words. The variety of pauses, even in their poetry, by which
 “ the verse was broken into several parts, like a period in prose,
 “ is praised by the Halicarnassian (c) as a beauty, in the same
 “ manner as the variety of pauses in Milton’s blank verse is
 “ commended by our critics.

“ And in this way, I think, there must have been a great deal
 “ of rhythm as well as melody in the Greek language, if rhythm
 “ be, as I have defined it, vol. II. p. 302. “ A certain relation
 “ or analogy, in respect of length or duration, which the
 “ mind perceives betwixt sounds or motion of any kind.” For
 “ the ratios of the metrical feet of the ancients to one another
 “ are various. The ratio of the *spondee* to the *dactyl* is that of
 “ equality; the ratio of the *spondee* or *dactyl* to the *pyrrhic*
 “ is as two to one; of the *pyrrhic* to the *tribachys* as two to

(c) See vol. II. Diss. iii. p. 560.

“ three;

“ three; of the *tribachys* to the *spondee* as three to four, &c.
 “ And if you want any other measure of the ancient poetry
 “ besides the feet, you have the verse itself, at the end of which
 “ there was always a pause greater or less; the consequence of
 “ which was, that the last syllable, though by its nature short,
 “ was considered as long. And this by the bye shews, that the
 “ pauses, according to your notion, stood for something in the
 “ measure of the ancient verse; and that perhaps, not only in
 “ the end of it, but in any other part of it, if the sense required
 “ a pause. And I have a fancy, that many difficulties in the
 “ versification of Homer might be solved in that way, though no
 “ critic, as far as I know, has thought of such a solution.
 “ Concerning this I will enquire further when I have more
 “ leisure. And so much for the melody and rhythm of the
 “ Greek language.

§ 9. “ As to the melody of our language, I once thought that
 “ there was no tone in it, but what was either provincial, or
 “ what belonged to some passion, humour, or sentiment. But
 “ you have convinced me, that even when we speak in the
 “ plainest manner, and as much upon a level as possible, still
 “ there is not a perfect monotony; but the voice is perpetually
 “ sliding up and down, more, as you observe, in public speaking;
 “ or even the conversation of men from the country, less in the
 “ conversation of men bred at court. ** But our accents differ
 “ from the Greek in two material respects. First, they are not
 “ appropriated to particular syllables of the word, but are laid
 “ upon different syllables according to the fancy of the speaker,
 “ or rather as it happens; for I believe no man speaking English
 “ does,

“ does, by choice, give an accent to one syllable of a word
 “ different from that which he gives to another; but he varies
 “ from necessity, not being able to keep his voice upon different
 “ syllables, perhaps not upon the same syllable, at the precise
 “ same pitch of tone. Secondly, the tone in common conver-
 “ sation in English, when we speak without passion or declama-
 “ tion, never rises so high as a fifth, at least as far I have
 “ observed; and, though some speakers may vary their voice
 “ so much, I am persuaded it is not common: whereas in Greek
 “ every man, who spoke the language properly, raised his voice
 “ to that pitch upon certain syllables and no other, whether he
 “ was speaking with passion or without passion, and whether he
 “ was haranguing or in ordinary conversation; for it was part of
 “ the grammar of the language, and a man would have been
 “ accounted a barbarian who spoke otherwise^(d). From these
 “ so material differences, I think, it follows, that our accents
 “ never can be reduced to rules of art, as the Greek were, or
 “ made part of the grammar of our language; far less can they
 “ be made a beauty in our composition as they were in the Greek.
 “ Nay I do not think that we could venture to mark the accent
 “ upon any single word taken by itself, unless perhaps it were
 “ an interjection, such as *oh*! All we can do is to observe how,

(d) Relative to this there is a remarkable story told by the Scholiast upon the oration of Demosthenes *περὶ Στιφάνου*. He tells us, that Demosthenes in asking the question of the judges, Whether Æschines was the *friend* or the *hireling* [*μισθωτός*] of Alexander barbarized on purpose [*βάρβαριζε*], by laying the accent upon the last syllable instead of the first. Upon which the people, as was natural enough, corrected him by repeating the word properly accented. This he took for an answer to his question; and, says he, you hear, Æschines, what they say, *ἀνδρες ἀλήτοι*.

“ in certain compositions of words, either in verse or prose, the
 “ best speakers accent particular syllables. And even among the
 “ best speakers it will be found, that as to the precise degree of
 “ the accent there is a great difference, and perhaps in the same
 “ speaker at different times; so that I should think it were almost
 “ impossible, even in compositions of words, to mark precisely
 “ the accent of each syllable, though, if it be possible, you have
 “ fallen upon a very ingenious way of doing it. †† Upon the
 “ whole therefore, I am of opinion, that very little can be made
 “ of the accents of our language; and that to observe them at
 “ all, is more a matter of curiosity than utility.

“ There is in our clauses, or ends of our sentences, not only
 “ a fall of the voice, but also, I think, a change of tone. This
 “ may be accounted part, and it appears to me the principal part,
 “ of the melody of our speech: for if it be neglected, the ear,
 “ as you observe, is cheated, and it really is very offensive. An
 “ exact notation how much the voice is let down in the con-
 “ clusion of periods, with respect both to loudness and tone,
 “ according to the practice of the best speakers, might, I think,
 “ be very useful; for I have observed, that many speakers offend
 “ in this article; some keeping up their ends too high, to use a
 “ phrase of Mr. Bayes; some letting them down so low as not to
 “ be distinctly heard; some changing the tone too much, and
 “ others too little. And so much for the melody of our
 “ language.

§ 10. “ As to the rhythm of it, I think it must consist in one
 “ or other, or all of the four following things: the quantity of
 “ the syllables; the variety of loud and soft; the pauses; and

“ lastly, your division into bars. And I shall consider all the
 “ four; first with regard to our prose, and then with respect to
 “ our verse.

§ 11. (*vide answer to § 7.*) “ As to quantity; though we have
 “ undoubtedly in our language some syllables much longer than
 “ others, yet I have always been of opinion, that it made no part
 “ of the rhythm of our language; and that it was a vain attempt
 “ to endeavour to reduce our compositions to metrical feet. And
 “ I am much confirmed in this opinion by observing, that you
 “ lay no weight upon the quantity with regard to rhythm,
 “ though you have taken the trouble to note it. Two reasons,
 “ I think, may be assigned for this. The first is, that the ratio
 “ betwixt the short and long syllables is by no means ascertained,
 “ as it was in the ancient languages. The second is, that by far
 “ the greater number of our syllables appear to be of the same
 “ length, as much as the different beats of a drum. I say,
 “ appear, for I would not be understood to mean, that there is
 “ not betwixt most of them, some small difference of lengths,
 “ discernible by a nice ear, like yours, but is altogether imper-
 “ ceptible to a common ear, and therefore must go for nothing
 “ in the composition either of our verse or prose; whereas in
 “ the learned languages the difference was so great, that a false
 “ quantity in pronunciation was, as we are told, offensive to the
 “ meanest of the people.

§ 12. (*vide answer to § 7. ||.*) “ As to the variety of loud and soft
 “ in the syllables of the same word, it is a distinction which I see
 “ you admit; and indeed it is in English so perceptible to every
 “ ear, as to distinguish our language most sensibly not only from:

“ the learned languages, but, I believe, from every other modern
 “ language in Europe, as I am sure it is from the French. It
 “ has not, however, been attended to in our prose composition;
 “ and though, I think, it might even there make some kind of
 “ rhythm that might be agreeable, yet I do not know that it
 “ would be a beauty worth studying.

§ 13. (*vide my answer to § 10.*) “ It is the third thing I men-
 “ tioned, namely, the pauses, that, in my opinion, make the
 “ chief, if not the only, rhythm of our English prose. If these
 “ be not properly attended to, and the style properly divided into
 “ periods, and members of periods, of different lengths, varied
 “ likewise by pauses, shorter or longer, the composition will be
 “ altogether without numbers, and will never be approved by a
 “ good ear; and, as speaking is the best trial of composition, this
 “ defect will chiefly appear when the performance is read or
 “ spoken. But though I insist so much upon the variety of the
 “ pauses, as well as the whole structure of the composition, I do
 “ not deny, that there should be likewise sometimes an uni-
 “ formity; and that sometimes periods, and members of periods,
 “ of the same length, sometimes with words answering each to
 “ the other, will now and then be agreeable. This was a figure
 “ well known to the ancient masters of art, and was too much
 “ practised by some of their orators, particularly Isocrates; but
 “ was more moderately used by Demosthenes, who has joined in
 “ his style great variety, and at the same time uniformity, with
 “ respect to his pauses, as well as every other part of his com-
 “ position.

“ The

“ The last thing belonging to the rhythm of our language I
 “ proposed to consider, was your method of dividing our prose
 “ into equal parts, which you call *bars*. That this has hitherto
 “ never been practised in English is a fact most certain; but that
 “ it is practicable I have no doubt, as I can see nothing in the
 “ genius of our language that forbids it. And if it be true, as
 “ it undoubtedly is, that there can be no rhythm without
 “ measure, a method which contrives to measure the whole
 “ composition, the pauses or intervals, as well as the sounds,
 “ should contribute very much to make the composition rhythmi-
 “ cal and numerous. Of such a rhythm, I believe, every person
 “ who had an ear would feel the effect, though very few would
 “ be able to assign the cause, which you know is generally the
 “ case in all the popular arts. And so much with respect to the
 “ rhythm of our prose.

§ 14. “ As to our verse, there is one part of its rhythm
 “ which every body perceives, and that is the equal length of
 “ the verses. That arises from their consisting of the same
 “ number of syllables; ten, for example, in our hexameter verse.
 “ Nor can this be dispensed with; for even a pause, however
 “ long, will not supply the want of a single syllable.

“ 2dly, In our rhyming verse, and particularly in Mr. Pope’s,
 “ there is a kind of rhythm produced by the stop or cæsure,
 “ about the middle of the verse, of the same kind with that of
 “ the French long verse. This I have always thought a blemish;
 “ both in our verse and the French; for it makes the compo-
 “ sition, which was before too uniform, by being in sentences
 “ of a certain determined number of syllables, still more tediously
 “ uniform.

“uniform. And I approve much more of our blank verse, which
 “only stops where the sense requires it, besides the advantage it
 “has of running the sense of one line into another; a privilege
 “which our rhyming poets of former times used, but which is
 “now given up. This division, therefore, of verse into hemi-
 “stiches is not an essential property of our versification, any
 “more than the rhyme; but the first I mentioned; *viz.* the
 “number of syllables is essential, so that there cannot be verse
 “without it. And I am now to mention another, which I
 “likewise hold to be essential; and that is,

(*The same as § 7. ||.*) “3dly, The mixture of loud and soft
 “syllables, and the percussive at certain stated intervals of the
 “loud syllable. This is so essential to our verse, that, if the
 “sense require that an emphasis should be laid upon the soft
 “syllable, it evidently mars the verse. Thus, if in reading the
 “first line of the *Paradise Lost*, you were to lay an emphasis
 “upon the word *first*, which by no means is necessary, the verse
 “would plainly halt, and be different from the succeeding verse,
 “where the syllable *for*, of the word *forbidden*, which answers
 “to the word *first* in the preceding line, must necessarily be
 “founded soft. And it is a beauty in our versification, when
 “the emphasis, which the sense requires, and the *forte*, which
 “is necessary to the verse, coincide, as I have observed (a) in those
 “famous verses of Denham upon *Cooper's Hill*, “Though deep,
 “yet clear, &c.” And as this mixture of loud and soft is peculiar
 “to our verse, so it is also peculiar to our language; distinguishing
 “it, as I have observed, not only from the learned languages, but

(a) Vol. II. p. 389. “from:

“ from every other modern language in Europe, as far as I know.”

“ I should therefore have thought it strange, if it had not entered

“ into the composition of our verse.”

§ 16. “ The two things, therefore, that, in my opinion,

“ constitute our verse are, the number of syllables, and the

“ mixture of loud and soft, according to certain rules. ¶ As to

“ quantity, it is certainly not essential to our verse; and far less

“ is accent.”

“ As to your method of dividing our poetry into bars, like

“ music, it is exceedingly ingenious; and I have no doubt that

“ it will be useful in poetry, as well as in prose, towards forming

“ a just ear. But it is to be observed, that the rules of music

“ will not apply to our verse in this respect |||; that the pauses,

“ as I have observed, cannot stand for any part of the verse, nor

“ supply the place of a single syllable; whereas in music, the

“ pauses make bars, or parts of bars. At the same time, these

“ pauses are a very great beauty, particularly in our blank verse,

“ filling up a considerable part of the time; and therefore are

“ very properly considered as a part, at least, of the time of the

“ verse, if not the verse itself ***.”

“ As to the comparison you make betwixt the melody and

“ rhythm of the English language and those of the Greek,

“ although you have shown that there is more of each in the

“ English language than is commonly believed, yet I cannot

“ think, that our language will bear comparison with the Greek

“ in this any more than in other respects. As the excellence of

“ their grammatical art admitted of a great variety of arrange-

“ ment; ††† and as certain syllables of certain words had parti-

“ cular

"cular tones appropriated to them, they had it in their power, by
 "different compositions of those words, to mix those tones, so
 "as to make a music agreeable to the ear, and which accordingly
 "is observed by their critics as one of the beauties of their com-
 "position. Now, I think, it is certain, as I have already
 "observed, that our composition can be little or nothing im-
 "proved in that way. And as to rhythm, we have not what
 "they called *rhythm*, arising from a certain composition of
 "long and short syllables; and therefore we are obliged to make
 "our verse in a manner quite different from theirs; that is, by
 "the number of syllables, and the mixture of loud and soft: a
 "way which we may think preferable, because our ears are not
 "formed to their rhythms; but which I cannot bring myself to
 "think, is near so numerous as their versification. ||||| In short,
 "the Greek language was the work not only of grammarians and
 "philosophers, but of musicians; for the Greeks excelled no less
 "in music than in other arts, and applied it very much to the
 "improvement of their language: whereas the Romans, whose
 "musical parts (to use an expression of my lord Shaftesbury)
 "were not near so good, though they spoke originally the same
 "language, did not cultivate it so much in any respect, and
 "particularly did not improve the sound of it so much as the
 "inhabitants of Greece did. Our language, on the other hand,
 "is the production of unlearned, popular use, corrupting a
 "better language, out of which it has grown; I mean the Saxon,
 "which again is a corruption of the Gothic. This degeneracy
 "of the art of language, as well as of other arts, is, I think, to
 "be accounted for from the nature and history of man; and I
 "will

" will endeavour to do it, in the last part of my work, wherein
 " I am to treat of the decline of language, if ever I shall execute
 " it. For the present it will be sufficient to observe, that in the
 " art of music, which you understand so well, if we can believe
 " the testimony of all the ancient authors who treat of it, there
 " is a wonderful falling off; for the *diatonic*, which we now use,
 " was only the music of the vulgar among them; whereas the
 " music of the connoisseurs and the men of taste was the *chro-*
 " *matic*, and particularly the *enharmonic*. If you think it worth
 " while, you may see what I have further said upon this subject,
 " vol. II. p. 288."

CADENCE, yet they are not quite the same, as I shall explain hereafter.

RHYTHMUS, as it is signified with the Greek number; that is, the number of lines contained in a line or sentence; so it may signify with us, the number of CADENCES in a line or sentence; but I use it also as the general term under which CADENCE is a division, and QUANTITY a sub-division. And when I describe

ANSWERS TO THE SECOND SET OF OBSERVATIONS AND QUERIES, BY THE AUTHOR OF THE ORIGIN AND PROGRESS OF LANGUAGE.

But before we come to the fractional division of the CADENCE, there is an integral division of it to be considered, properly called

IN order to answer so accurate and subtilizing a querist as your self, I have endeavoured, from the beginning, to reduce my subject to system. This required a set of pertinent appropriated terms, which were not easy to find, to my intire satisfaction, considering the misapplication of several important words, and particularly of *accent* and *measure*, confirmed by immemorial vulgar use.

ACCENT, I was obliged to compel, as it were, by rude force to its proper duty.

MEASURE, I unwillingly left, in compliance with the vulgar idiom, as a term of the same import with *rhythmus*; and yet, in truth, it should have been confined to the Greek sense of *metre*.

But having adopted CADENCE instead of *metre*, as a word which seems to explain itself to our senses, by intimating the pulsation of time, I shall still continue it in that place; because, though I frequently shew, that *metre* is almost synonymous with

CADENCE, yet they are not quite the same, as I shall explain hereafter.

RHYTHMUS, as it signified with the Greeks *number*; that is, the *number* of *metres* contained in a *line* or sentence; so it may signify with us, the *number* of CADENCES in a *line* or sentence: but I use it also as the general term under which CADENCE is a division, and QUANTITY a sub-division. And when I describe this sub-division of a CADENCE, I say, it is *metrically* divided into such aliquot fractional parts; that is, long and short QUANTITIES, as make up the *intirety* of the CADENCE.

But before we come to the fractional division of the CADENCE, there is an integral division of it to be considered, properly called *its METRE*, according to which the aliquot QUANTITIES are *metrically* computed and disposed. That is, the CADENCE is either equally divided by the *integral* even number two, or the *integral* odd number three which constitute the two general modes of *metre* (or MEASURE), these two, being the first numbers possible, that occur, for the division of matter. That is, the first possible division of any length is into two parts; and the next possible division is into three parts. But further than these *two modes* of *equal division* nature has never yet gone in the *equal division* of *sensible time*.

For if a CADENCE be divided into four integral equal parts, the number two will still be the divisor, and it will *sensibly* become two CADENCES.

A division into *five equal parts* nature will not admit. (Vide p. 23. and 26.)

A division

A division into six equal integral parts is either the double of three, or the triple of two; and consequently, may be mentally reduced or sub-divided into two *cadences*, or into three *cadences*. And the like of all other admissible divisions; for the divisions of 7, 11, 13, 17, 19, &c. equal parts, are not admissible. (P. 23. and 26.)

I have shewn the similitude between the Greek *metres* and OUR *CADENCES*; *videlicet*, that the *rhythmus* or number of *metres* made lines, thence called hexametres, pentametres, &c.; so with us, the *rhythmus* or number of *cadences* make lines, such as octometres, hexametres, &c.

Now I must shew how they differ.

CADENCES, under the same *RHYTHMUS*, are exactly equal in duration of time to each other, and are commensurable by even steps, or by the pulses of a pendulum.

But the Greek *METRES*, though nominally under the same *RHYTHMUS*, are not always of equal length; some being simple *METRES* of one *foot*, and others compounded by *copula* of two *feet*, of various lengths; consequently, not always reducible within the compass of equal periodical pulsations like our *CADENCES*.

For *CADENCES* always begin with *thesis*, or Δ the *heavy* syllable, and end with *arsis*, or $\therefore$ the *light*; consequently, between step and step, or, musically speaking, between *bar* and *bar*, the whole of each *CADENCE* is included.

But some Greek *feet*, of which their *METRES* are composed, begin with *arsis*, or $\therefore$ the *light*, and some with *thesis*, or Δ the *heavy*. And consequently, the Greek *METRES* cannot always be

included, as our CADENCES may be, between the pulses of equal time, such as our *steps*, and such as we mean to mark by musical *bars*; because the pulses, always coincident with the *thesis*, or Δ the heavy, would sometimes fall in the middle, sometimes on the beginning, and sometimes obliquely, neither on the beginning nor in the middle, which is the case in almost all the METRES by *copula*, the *bacchic*, the *cretic*, the *pacons*, and the *epitrites*.

The space of time between each pulsation and the next succeeding pulsation, I have called a CADENCE or *bar*, because I usually mark a *bar* at every CADENCE, though in common music, two or more CADENCES are often comprised in one *bar*'s length.

The whole time of the CADENCE or *bar* (as afore said) must be capable of being equally divided either by the number two, the essential and distinguishing mark of the genus of common measure, or by the number three, the essential mark of the genus of triple measure.

The whole quantity of the time or duration of a CADENCE or *bar* (whether common measure consisting of two integral units, or triple measure consisting of three integral units), may be subdivided by *metrical articulation* (in sound or in silence) into any unequal fractional quantities of time, provided their sum altogether be neither more nor less than the integral quantity of the said cadence or bar. (Vide page 24.)

The term QUANTITY is appropriated to discriminate the relative value of sounds in duration of time, being either the QUANTITY of whole CADENCES, or the QUANTITY of each of the subdivisions of a CADENCE; that is, it refers to the distinction of longer and shorter notes or syllables, or of longer and shorter pauses.

included

2 Q

Consequently,

Consequently, the time or duration of every individual sound, syllable, or pause (in the sub-division of the equal or integral numbers of a cadence into unequal though aliquot parts; or the re-union of such unequal or aliquot fractions into whole numbers), is called its QUANTITY.

The *instinctive* sense of *pulsation* gives the mind an *idea* of *emphasis* and *emphatic divisions*, independent of any actual increment of sound, or even of any sound at all. But emphasis and emphatic divisions imply, that there are some sounds of a different nature; that is, that there is a discontinuance or diminution of emphasis with or without discontinuance or diminution of sound; or, in other words, independent of sound. And hence we have the mental sensation of *emphatic* and *unemphatic*, which I distinguish and represent by the words and symbols of Δ *heavy* and $\therefore$ *light*. (Vide p. 20.) And as a common term to signify both, I appropriate the word POIZE, in like manner as ACCENT is used as the common term for *acute* and *grave*, and QUANTITY for *long* and *short*. (See note, p. 77.)

It is the office of RHYTHMUS, aided by the *influence* of this *instinctive* POIZE, to regulate the whole duration of any melody or movement by an exactly equal and periodical pulsation, until it is thought proper to change the measure, for some other uniform pulsation, either quicker or slower.

In the time of the world, a natural day (night included) is a single *cadence*; the setting and rising of the Sun are the *thesis* and *arsis*; seasons and years are rhythmical clauses: the real beginning and the ending of this melody are out of our sight; but

to human apprehension, the apparent are birth and death, and life is our part in the song.

See Observations, p. 96. § 3. *. "How is the length of those
"equal portions, into which the mind is pleased to divide the
"tune, determined? Why are they not greater? or why are
"they not less? To what previous standard does the mind refer
"in this division? &c."

The beating of our *pulse*, which we must feel whenever we are silent and inactive, prones us to *rhythmical divisions* even in the series of our thoughts; as soon as we begin to move, our *steps* succeed in the government of *rhythmical pulsation*, and the *measure* may then be at our option faster or slower; for while we were silent and motionless, the *measure* of our thoughts must have been regulated by the *cadences* of our *pulse*, which is an involuntary motion.

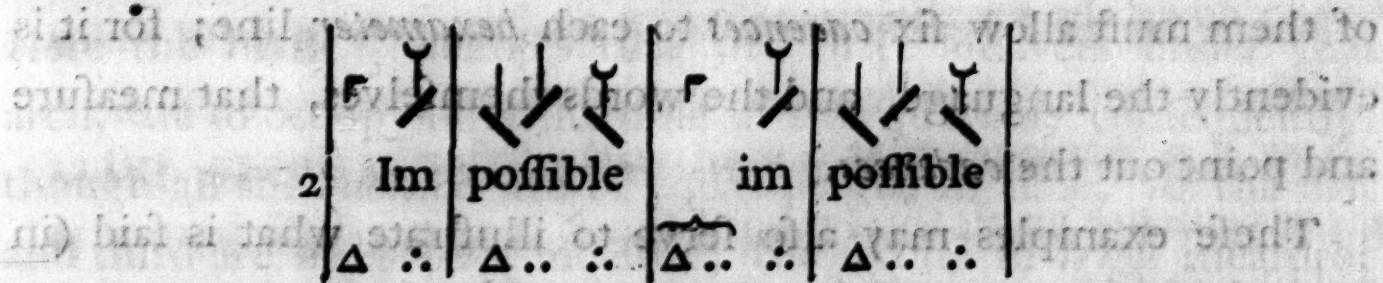
Every single *step*, or every pace, may mark a *cadence*, the putting down the foot being Δ *heavy*, and the lifting it up being $\therefore$ *light*.

Now it is obvious, that a man walks faster or slower, either for convenience or pleasure; but I think it as needless here as it would be endless, to look for the causes that might be the first movers in his mind, either of his conveniency or his pleasure in such a case.

If our *pulse* is to govern the time or length of a *cadence*, the *thesis* Δ and *arsis* $\therefore$ must keep pace and coincide with the *syssole* and *diassole* of the heart.

If the *step* or pace, then between walking and running there is a latitude for a great variety.

But in the *rhythmus* of language, all polysyllables are affected to their *poize* of *heavy* and *light* so positively (and the *poize* determines the *cadence*), that nothing remains in doubt except the difference between the slowest and the fastest speaker. However, that doubt is of no consequence in this argument, since every speaker, if he preserves the proportions demanded by the natural *quantity* and *poize* of the words, must adopt that measure of quickness that the *poize* of the words points out; that is, he must allow himself time to make the difference between long and short syllables: for, as it has been often repeated before, a *cadence* must begin with Δ the *heavy* and end with $\therefore$ the *light* (the *lightest* being only an inferior species of the *light*); or, in other word, as every *cadence* begins with Δ the *heavy*, of course the whole of every *cadence* lies between Δ *heavy* and Δ *heavy*, as often as they occur. For example,



This word in common measure cannot be twice repeated without leaving the *quantity* of half a *cadence* in silence under the Δ *heavy*, as the first syllable *im* is under the *light* $\therefore$ *poize*.

In triple measure it may be noted thus:

im possible im possible

But suppose a person of opinion, that *accent*, *quantity*, and *poize*, were quite arbitrary in modern languages, should desire them to be varied on this word; for example thus:

impos fible impos fible

it is no longer an *English*, but clearly a *French* word.

Now to return to the answer of the question before us, these examples shew, that though a rapid speaker may repeat three *hexameters*, while a deliberate speaker pronounces only one; yet if they both understand the language, and give it its due, each of them must allow six *cadences* to each *hexameter* line; for it is evidently the language, and the words themselves, that measure and point out the *cadences*.

These examples may also serve to illustrate what is said (in p. 115. and 116.) concerning the difference between Greek *metres* and our *cadences*. For the *English* words, *impossible*, *impossible*, are *metres* of two *choriambic* feet; but the *cadences* are *anapaests* in common measure, and *Ionici à minore* in triple measure; as *French* words they are *spondaic*, *metre* and *cadence* all the same.

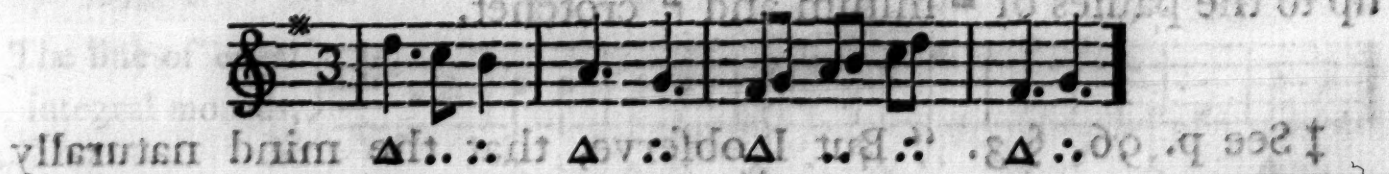
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But as I propose these new marks of notation to be written with prose or poetry, in order to prescribe any such manner of enunciation to a reader, as the writer shall think proper; the writer may follow his judgement or fancy in fixing the degree of velocity, by marking it for two steps to a second of time, or one step to a second, or more, or less; or he may leave a greater latitude, by marking it *slow walking time*, *moderate walking time*, *quick walking time*, or *running time*.

I have shewn in several examples, how easily the two general modes of times, *common* and *triple*, may be intermixed, by varying the *metrical* sub-division of the *cadences*, and without making any alteration in the *rhythmus*; as, suppose a piece marked for *common measure* thus,



Here the mark $\overset{3}{\curvearrowright}$ denotes that the three quavers under that arch, are to occupy only the time of two quavers; consequently, though all the *cadences* are of equal length in time, yet the first and third are in *common* measure; the second in *triple* measure; and the fourth *mixed*, half *triple*, half *common*. Again, suppose a piece marked for *triple measure*, as,



Here the second and 4th bars or *cadences* have evidently the effect of being in *common* measure, as each of them consist of only two

omi "

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notes

notes of equal length; the first and third *cadences* are evidently in *triple* measure; but all the *cadences* are of equal length, and under one *rhythmus*.

Now suppose a line written and noted, and at the pleasure of the writer the measure to be governed by that of a moderate walk, wherein each step occupies a second of time;

3 | Arma virumque cano, Trojæ qui primus ab oris

Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ .. Δ ..

(Here, though the measure is marked *triple*, yet as the two genera are virtually intermixed, the quantity allowed to the *arsis* or the *light* part being by the mark $\therefore$ (which in this case comprehends as many notes as are equal to half the *cadence* or *bar*) made equal in duration of time to (Δ) the *heavy* part, the whole *bar* or *cadence* consists only of one *step*.)

Then let the reader walk and pronounce, putting down (suppose) the right foot to *ar*, lifting up the other with *ma vi*, down again on *rum*, right foot up to *que ca*, down to *no*, the left up under the *pauses* $\text{r } \text{r}$, and down under the *pauses* $\text{r } \text{r}$, the right up to *Tro*, down to *jæ*, left up to *qui*, down to *pri*, right up to *mus ab*, down to *o*, left up to *ris*, left down and the right up to the *pauses* of — minim and r crotchet.

† See p. 96. § 3. "But I observe, that the mind naturally divides some tunes, and particularly Scotch tunes, into many more notes, &c. — There I find it difficult to resolve the bar into

“ into steps or paces.—A measure,—such as has no standard
“ in nature.”

In answer to this, I say, that the (Δ) *heavy*, and ($\therefore$) *light*, in
common measure, where two is the divisor; or the (Δ) *heavy*,
($\therefore$) *lightest*, and ($\therefore$) *light*, in the pure *triple* measure, where
three is the divisor, are to correspond with those integral monads,
which determine the genus of the measure, and not with their
various fractional sub-divisions; which, though I think it has
been shewn by examples before, I will here endeavour to illustrate
farther by some others.

EXAMPLE I.

Very slow walking-time.

Line of equal integral monads in the cadences of common measure,

Metrical sub-division of the same cadences into unequal quantities,

EXAMPLE II.

A step to a second of time.

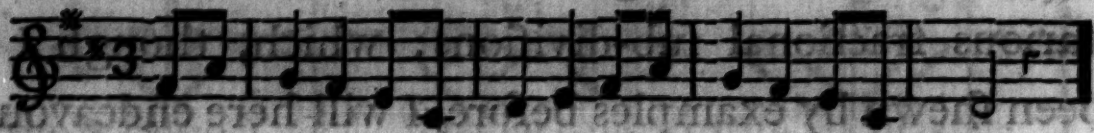
Or the same melody thus,

The line of equal integral monads,

EXAMPLE III.

Example where two steps or a pace make a cadence of triple measure, corresponding with the walk of a lame man.

Three seconds of time equal to a cadence; the thesis of the lame leg equal to $\Delta \dots$; and that of the sound leg equal to $\dots$.



Line of 3 equal integral monads corresponding with this example,



EXAMPLE IV.

Example of the pure triple measure, one step only to a cadence, and the time three-fourths of a second to each step.



Vent' anni sono foste tro vata qui' abbandona da' un Colonello.
 $\Delta \dots \Delta \dots \Delta \dots \Delta \dots \Delta \dots \Delta \dots \Delta \dots \Delta \dots$



If your l—p had pointed out to me what particular tunes you found, that would not submit to your measurement by steps, I would have given you a demonstrative answer on those very tunes;

tunes; for I will venture to assert, that there are none in nature that will not submit to these rules.

When our modern method of notation was first introduced, and for a long time after, there were no bars thought of; and also for many years after the division by *bars* was found useful, they were rather applied as the marks of *rhythmical clauses* (vide p. 23. and p. 30.) than of *individual cadences*. In Corelli's compositions they were, for the most part, so sparingly used, as to be only the marks of *rhythmical clauses*: for instance, the allegro, called *Giga*, in the eleventh sonata, opera secunda, of that author, (the measure of which seems so difficult to young performers, that it has got the name of the Devil's sonata), has its *bars* marked only at every *fourth cadence*; and the difficulty of keeping the measure arises first, that the *bars* seem as if they were marked, not at the beginning of each apparent clause, but either on a *cadence* too soon or too late; secondly, the clauses appear as if they were unequal, as there seems to be in the first part, three *clauses* of four *cadences* in each *clause*, and two of ten *cadences* in each. But the second part, which is easier to be played, is divided into eight *clauses* of four *cadences* in each: however, it cannot be doubted, that the author intended this as a piece of rhythmical drollery; for had the *bars* been marked at each real *cadence*, which in this air consists of three quavers, the measure would appear to be the same as that now usually marked in the triple measure *prestos* of modern composers, and would remove the difficulty so puzzling to young performers.

The Scotch airs, called *Lovely Nancy*, *Thro' the wood, laddie*, the English air, *As near Porto Bello lying*, and many others in the like

like stile, are set in flow triple measure of three monads in a *bar* (vide foregoing example, N° III.). But in fact, each *bar* of that flow measure may be considered as a *rhythmical clause* of three *cadences* or steps of common measure, each *cadence* or step including its Δ and $\therefore$ in the space of a second of time. Thus,



“ How can you, lovely Nancy, &c.”

I have marked the beginning of each claufular division by thick *bars*, numbered 1st. 2d. 3d. and 4th. in those places where *only* BARS are marked in the usual way of writing this air in triple measure, each of those *thick bars* comprehending three of our *cadences*; and these are truly the natural *cadences* of this air, which demands the Δ emphasis as often as I have marked it.

Whether, by what I have said, I shall be able to satisfy your l—p in this point or not, I cannot tell; but I am quite clear myself, that every species of rhythmical sound can be ascertained by the standard of our step. And though the various paces of quadrupeds furnish us with rhythmical movements of jig triples and double *cadences*, such as the Υ | Υ .

$\therefore$ Δ Δ $\therefore$ $\therefore$

which are not naturally made by bipedes, yet our habit of riding makes us almost as familiar with the measures beaten by the paces of horses as if they were our own.

P. 97. § 4. "I am convinced, that the antient music must
"have been divided, as well as the modern, into bars, &c."

If your l—p has found any antient authority to convince you
of this, it must convince me too; but until that is pointed out to
me, I must remain of a different opinion.

Though the INSTINCTIVE SENSE of *periodical pulsation* is cer-
tainly coeval with our animal frame, yet the invention of the
pendulum has made the moderns more accurate and expert in
divisions of time than those antients who had no such help.

I think, if the Greeks had had the same idea and use of *bars*
in their music as the moderns have, Aristides Quintilianus would
not have been totally silent about them. When he is explaining
rhythmus, he says, Μέλος μὲν γὰρ νοεῖται, καθ' αὐτὸ μὲν τοῖς δια-
γράμμασι, ἢ ταῖς ἀτάκτοις μελωδίαις· μετὰ δὲ ῥυθμῷ μόνον, ὡς ἐπὶ τῶν
κρεμάτων ἢ κώλων.——Ῥυθμὸς δὲ καθ' αὐτὸν μὲν ἐπὶ ψιλλῆς ὀρχήσεως·
μετὰ δὲ μέλους, ἐν κώλοις. (Meib. vol. II. p. 32.) Which I under-
stand thus: "Song, simply by itself, appears in *written characters*
"and in *unmeasured melody*. And joined with rhythmus alone,
"in *pulses* and *feet*.——Rhythmus by itself appears in * *naked*
"(or silent) dancing; but joined with song, in *feet*." I take the
word κρέμα (or *pulses*) to signify here the throbbing sounds of
instruments struck like the lyre, which could only mark the
quantity of each note, but not measure *cadences*. And κώλῳ must
mean *feet*, the members into which their music and poetry were
divided: for if it meant the members made by the cæsure, it was
departing from the true meaning of rhythmus, which is number;

* The movement of dancing without, or abstracted from, music.

that is, the number of metres or feet in a line. Surely, if they had had any *διαγράμματα* like our *bars* for marking the (divisions of *rhythmus* into) *metres*, this author would have mentioned them, as well as the *diagrammata* or written characters for the song or melody.

The invention of our modern notes, the figures of which declare accurately their *metrical quantities*, together with the *bars* to mark the *pulses* or *rhythmical divisions*, have rendered the Greek feet totally useless in the practice of our music.

As mechanical instruments for the composition of poetry, the *Greek feet* were ingenious, though intricate and inaccurate when compared with our musical *rhythmus*; but now, if joined with ours, I conceive, the two together may become useful for the better reading of the antient classics, and perhaps for modern compositions in our own language.

According to our method of *rhythmical divisions*, by *bars* or *cadences*, and by the *metrical sub-division* of those *cadences* into *sub-duples*, *sub-triples*, or any such mixed fractional numbers as are aliquot parts of the whole *cadence*, there are no words or form of words, but what, by the aforefaid rules and the aid of measured *pauses*, may be reduced to an exact *rhythmus*.

Aristides's division of *times* into *rhythmical* and *non-rhythmical*, I understand as meaning to say as I have done (p. 11. 21. 23. 26.); that is, that *rhythmical* time is only capable of being generically divided either by the even number two, or by the odd number three; but that the numbers seven, eleven, thirteen, seventeen, nineteen, &c. are *non-rhythmical* divisors. And perhaps his *rhythmoides*, or apparently *rhythmical times* may correspond

correspond with the exception which I have made for the number five in *clausular divisions* (page 23.). His sentence, τέτρω δὲ οἱ μὲν τρογύλοι καλεῖνται, &c. That "some of these are called round; " because they run too fast; and others, *superabundant*, or over-measure, because by their composition of sounds they move " too slow," shews that they had not the use of marked *bars* and marked *pauses* for regulating their rhythmical *cadences* as we have. For in the example so often repeated,



I take *happiness* to be, according to Aristides's sense, a *round* word, as it runs off the tongue before it reaches the end of the cadence; the vacant time of which, however, is made up by the crotchet pause (τ), and the *rhythmus* thereby continued without interruption.

The *superabundant* was very likely to happen in Greek in many of their long polysyllabic compounded words, because their *metrical* proportions of *quantity* were thought to be only *two* and *one*; but in our language, according to our system, which admits a much greater variety of *proportional quantities*, I can think of no word not reducible both to *metre* and *rhythmus* in *cadences*.

It seems clear, that the Greek *metres* were raised both in their music and poetry from *syllabic feet*; so that they could admit of no *quantity* of sound, longer or shorter, than what was (as I

may say) the *flamtable* length of some syllable, and that syllable must have been a portion of some *legal* foot. So that, though in their *dactylic measure*, the *cadences* might have been as equal as if they had been marked by *bars*, and measured by a pendulum or steps; yet in their *compound* or *mixed measures*, the *cadences* were unequal, which plainly shews they had not a notion of *bars* like ours, which divide all *rhythmi* into equal *cadences*.

P. 97. § 5. "As to what I have said of time, &c."

Time being a general word of great extent, is used by modern musicians to distinguish the two modes, *common* and *triple*; next to those it distinguishes also the species, *allegro*, *adagio*, *largo*, &c. and more particularly minuet, jig, allemand, ciacone, faraband, &c.; therefore having carried the term *time* far enough, for the rest, it is well to follow the distinction made by the latter commentators, by appropriating the term *quantity* to denote the duration or length of a single tone or syllable. It is certain the Greeks used the word *time* in music, in a manner directly opposite to the moderns; for they fixed a minimum or shortest note as their standard measure, which they called *one time*; their next greater was two times, the next three times, &c. But they did not conceive any syllable, within the rules of *rhythmus* and *metre*, to be of $1\frac{1}{2}$, or $2\frac{1}{2}$, or three times; their *ἡμιόλιον τε καὶ ἐπίτριτον* (that is, sesquialterate and supertertian), relate only to the division of their *metres* by *arsis* and *thesis*; for example, in a *metre* of five times, giving two to *arsis* and three to *thesis*, or *vice versa*: and in a *metre* of seven times, giving three to *arsis* and

and four to *thesis*, or *vice versa*. Still insisting, that for syllables, they had only two measures; *videlicet*, of *one time*, or of *two times*.

Whereas, when the modern musicians refer to any thing like a *standard for time*, it is to a *maximum*, which they suppose may be subdivided to infinity by *sub-duples* or *sub-triples*.

However, in settling a standard for the *metrical quantities* of language, it is most proper to adopt the *minimum*, or *shortest syllable*, for that purpose; as no sound in speech can be shorter than the *shortest syllable*; and therefore, in this system I have made no mark for any note shorter than (|) the *quaver*, which, according to the Greek manner of computing, stands for *one time*.

P. 99. § 6. t. "I rather incline to think, that upon the syllable next following the acute, the voice would begin to fall, and continue falling upon that, and perhaps upon the next after that, &c."

Your l—p's opinion in this matter is, in general, very right, as you will see in the word *happiness* in my first example and many others.

It would require but little practice, with the help of an instrument (as directed p. 16.), to be able to mark all the accents of any speech or poem; for, in general, the distinction between *acute* and *grave* is so obvious, it can seldom or never be mistaken. The only difficulty lies in the *circumflex tones* (either $\wedge$ or $\vee$); for as they are confined within a small extent, and pronounced exceedingly rapid in the polite tone of our language,

and yet have in themselves both the sounds of *acute* and *grave*; if not accurately attended to, they may pass for either, though they are, simply, neither: therefore, whenever the ear is much puzzled to know whether an accent is *acute* or *grave*, it will be a good rule to suspect it to be a *circumflex* of one or the other sort. Our English sound applied to the vowel *u*, which in most cases is really a diphthong, as in *you, use, cure, pure, muse*, and the like, is always under the *circumflex* \ *acuto-grave*. And the English sound *i* in the first person, in *idle, iron, try, fly*, and the like, is always made by a *circumflex* / *grave-acute*.

P. 100. § 7. "When I speak of the accents or tones of the Greek language, I mean only syllabic tones which are appropriated to particular syllables of each words, according to certain rules delivered by the grammarians, &c."

When rules are delivered dogmatically as universals, without marking the exceptions and exemplifying all the varieties to which they are liable (a matter difficult to do, and very rarely done), they often lead into errors, either by too limited or too loose a construction. And this, we have great reason to think, has been the case, in regard to the prosodical rules of the Greek language.

I have no doubt, that the antient Greeks had nearly the same ideas annexed to *thesis* and *arsis*, as I have given to *heavy* and *light*; but not having used any marks for those expressions, is, I believe, the cause why *accent*, *quantity*, and *emphasis*, have been confounded together, as one thing, by the commentators of the middle and latter times.

The grammatical rules for fixing the *accents* in all *Greek words* are certainly not followed by the modern Greeks in the pronunciation either of their vulgar or of their antient language; though the learned among them are very correct (under those rules) in marking them in their writings; yet in their speaking (like all other nations), they make a manifest difference in the prosody of the same syllables when in a question, and when in an answer, or in other different intentions.

I think there can be no articulated language without *emphasis*, *accent*, and *quantity*. And any language (if any such there be) which wants the power of diversifying the application of each of those accidents in all its words, on particular occasions, must be so far deficient in the elegance, force, and aptitude of its expressions.

The few words, called by the Greeks *enclitics*, had, as we are told, this convenient quality, in some degree, by changing and giving up their *accent* to the word they clung to; but surely this was not enough.

Our *monosyllables* are much more pliant than their *enclitics*. I cannot recollect one that is not capable of changing to the complexion that will best fit the measure and intention of the speaker, and assuredly this is a perfection in language, which the commentators would fain persuade us the Greek language had not, by laying down rules that absolutely excluded it; however, I rather impute this to their errors or neglect, than to real defect in the language.

To elucidate what I have said, I will give a familiar instance in our own tongue, to shew the utility of changing these accidents
of

of syllabic expression. In which I shall introduce two of our monosyllables that seem most obstinately affected to the *light poize*; notwithstanding which, they readily submit to the *heavy*, when their position and the sense requires it. These are the prepositions *to* and *from*.

EXAMPLE.

3 As Peter was going to the hall, he met John.

Sure, you must take, you must mean, Peter coming from the hall.

or thus, you must mean, as Peter was coming from the hall.

Coming from? no, no, I say going to.

The musical notation consists of four staves. Each staff has a series of vertical lines representing pitch contours. Above each line is a symbol indicating the pitch: a horizontal line for a level note, a vertical line for a rising note, and a line with a hook for a falling note. Below each staff is a series of small triangles representing the rhythm or duration of the notes. The text is written below the pitch lines, with some words underlined to indicate syllable boundaries.

In this example, the monosyllable *to* is, in the first line, *short*, *acute*, and *light*; in the last, *long*, *acuto-grave*, and *heavy*.

FROM,

FROM, in the second and third line, is *short*, *acute*, and *light*; in the last, *long*, *acute*, and *heavy*.

HALL, in the first line, is *long*, *heavy*, and *acute*; in the second and third, *long*, *heavy*, and *grave*.

Here also it may be observed, that the two syllables of the word **GOING** being joined together by vowels, without the intervention of a consonant, pass off almost as a monosyllable, and the word, in regard to its *poize*, is also as pliant as a monosyllable; for in the first line it is *heavy*, and in the last, *light*.

Every one of these varieties makes a significant difference in the expression. A significant variety, without which no language can be compleat, either in speaking or in writing; but which, if applied to the Greek, must deviate frequently from the letter of the rules as commonly received and understood.

The variation, on the latter part of the second line, shews, that though the words **AS** and **WAS** were not expressly required to explain the sense, they were useful as expletives for the *euphony*; and that their addition made no alteration either in the *rhythmus* or in the *metres* of the *cadences*, since their quantities, when omitted, passed in silent pauses.

I have said in my answer to § 4. p. 128. "That perhaps the Greek method of composing by feet, joined with ours, might be of some use in modern compositions." In this view I shall here set down several English words, the first that occur to me, marking them with my notes of *accent*, *quantity*, and *poize*; and likewise give them the names of such *Greek feet* as their *quantities* seem to refer them to.

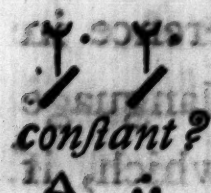
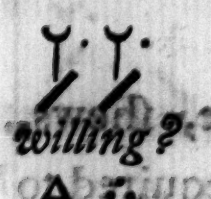
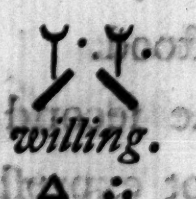
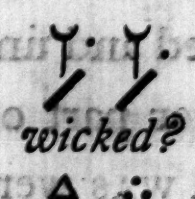
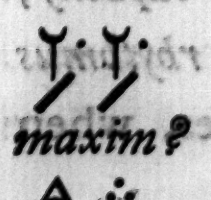
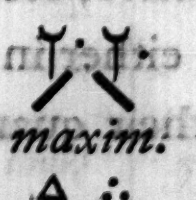
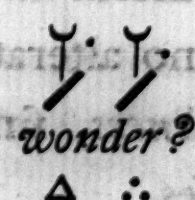
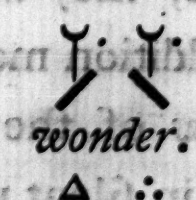
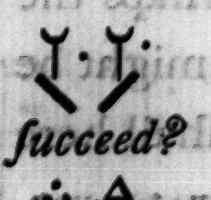
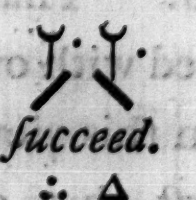
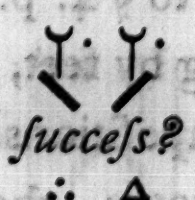
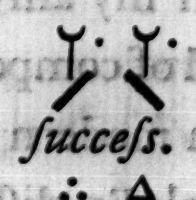
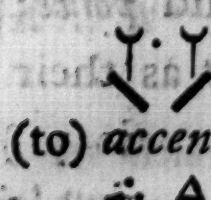
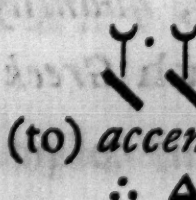
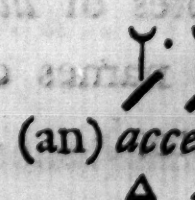
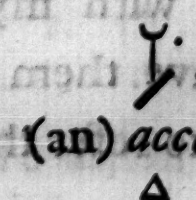
I

This

(03)

This Specimen, I hope, will shew that our language has the same title to syllabic accents, and perhaps as fixed, as those of Greek; for it is not probable, that the *Greek tongue* should have been denied the convenient power of marking the difference, between an *interrogative* and a *positive* expression, by the change of accent.

WORDS MARKED WITH PROPER ACCENT, QUANTITY, AND EMPHASIS.

 <i>constant?</i>	 <i>constant.</i>	 <i>careless?</i>	 <i>careless.</i>
 <i>willing?</i>	 <i>willing.</i>	 <i>wicked?</i>	 <i>wicked.</i>
 <i>maxim?</i>	 <i>maxim.</i>	 <i>wonder?</i>	 <i>wonder.</i>
 <i>succeed?</i>	 <i>succeed.</i>	 <i>success?</i>	 <i>success.</i>
 <i>(to) accent?</i>	 <i>(to) accent.</i>	 <i>(an) accent?</i>	 <i>(an) accent.</i>

(to)

(to) *insult*,
Δ Δ

spondee.

(an) *insult*,
Δ Δ

ability,
Δ Δ Δ

choriambic.

music,
Δ Δ

trochee.

ever,
Δ Δ

pyrrhic.

or, *music*,
Δ Δ

spondee.

sever,
Δ Δ

eager,
Δ Δ

trochee.

compensate,
Δ Δ Δ

moloffus.

eagerly,
Δ Δ Δ

dactyl.

compensation,
Δ Δ Δ Δ

choriambus.

able,
Δ Δ

trochee.

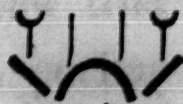
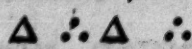
compose,
Δ Δ

iambic.

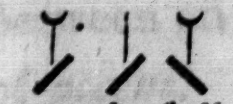
composition,



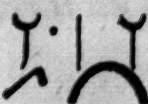
composition, third epitrite.



variety, choriambic.



wonderfull,



curious, dactyl or spondee.



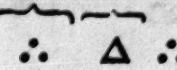
absolute?



dactyl, or anapæst
à majeure.



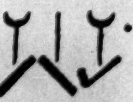
curiosi ty,



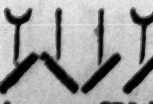
iambus and anapæst
per copulam.



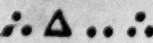
absolute.



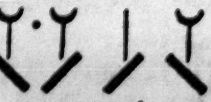
terrify, anapæst.



impossible?



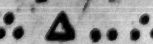
choriambic or



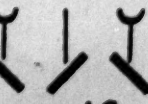
exterminate, choriambic.



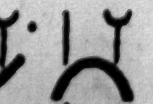
impossible,



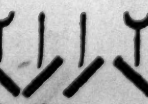
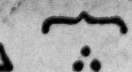
it pæon.



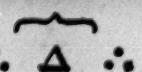
exquisite, anapæst.



various, dactyl or spondee.



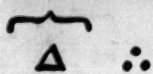
deliberate, choriambic.



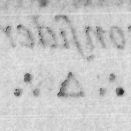
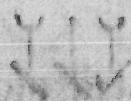
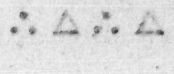
avarice,



avarice, anapaest.



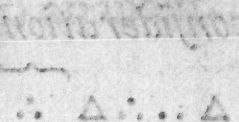
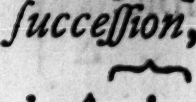
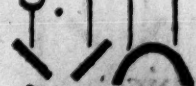
or, *confessor*, cretic.



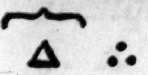
aver, iambus.



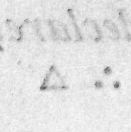
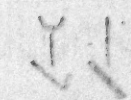
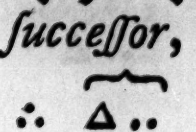
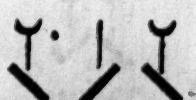
succession, 1st pæon.



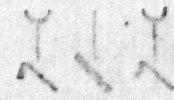
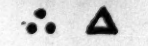
average, anapaest.



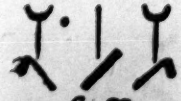
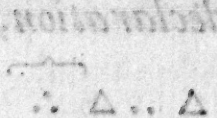
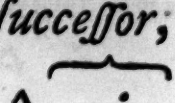
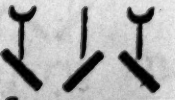
successor, dactyl.



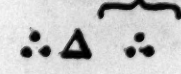
confess, iambus.



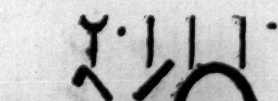
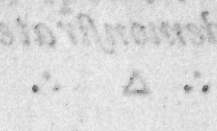
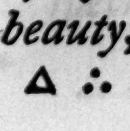
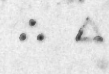
or, *successor*, cretic.



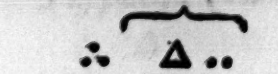
confession, dactyl.



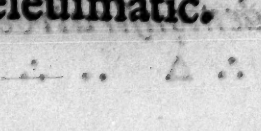
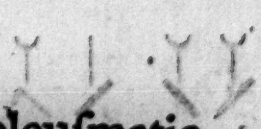
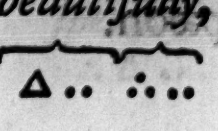
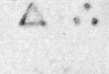
beauty, spondee.



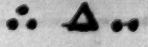
or, *confession*, 1st pæon.



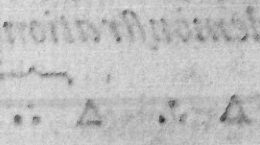
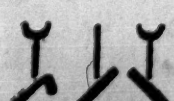
beautifully, proceleusmatic.

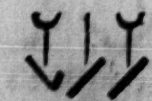


confessor, dactyl.



beautiful, cretic.





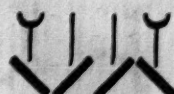
consider, cretic.
Δ Δ Δ



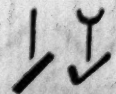
necessary, proceleusmatic.
Δ Δ Δ Δ



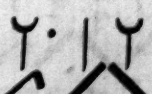
consideration, cretic-iambic.
Δ Δ Δ Δ



necessity, choriambic.
Δ Δ Δ Δ



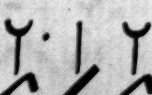
declare, iambus.
Δ Δ



musical, dactyl.
Δ Δ Δ



declaration, diambic.
Δ Δ Δ Δ



musician, dactyl.
Δ Δ Δ



(to) demonstrate, bacchic.
Δ Δ Δ



differ, pyrrhic.
Δ Δ



(a) demonstrative, 2d pæon.
Δ Δ Δ Δ



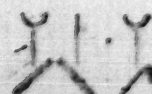
defer, iambus.
Δ Δ



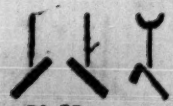
demonstration, diambic.
Δ Δ Δ Δ



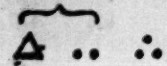
deference, anapæst.
Δ Δ Δ



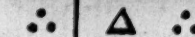
difference,



difference, anapæst.



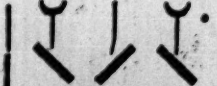
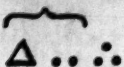
respect, (English) molossus.



proper.



delicate, anapæst.



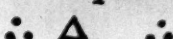
respect, (Scotch) anapæst.



error.



delinquent, bacchic.



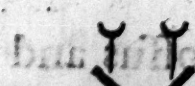
miser, spondee.



(a) project, iambus.



misery, anapæst.



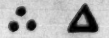
(to) project, spondee.



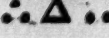
species, dactyl or spondee.



respect, (in suspense)



specific, dactyl.



iambics.



respect, (final)

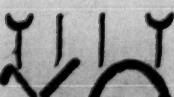


compare, iambus.



comparison,


comparison, choriambic.
 $\Delta \Delta \Delta$


continual, choriambus.
 $\Delta \Delta \Delta \Delta$

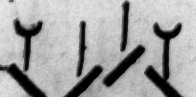

comparable, proceleusmatic.
 $\Delta \Delta \Delta$


continuation, dact. and spond.
 $\Delta \Delta \Delta \Delta$


instant, spondee.
 $\Delta \Delta$


constitution, dis-spondee.
 $\Delta \Delta \Delta \Delta$


instantaneous, spond. and dact.
 $\Delta \Delta \Delta \Delta$


constituent, choriambus.
 $\Delta \Delta \Delta \Delta$


communicate, choriambus.
 $\Delta \Delta \Delta \Delta$


constantinople, molossus and spondee.
 $\Delta \Delta \Delta \Delta$

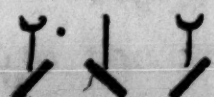

communication, dact. and spond.
 $\Delta \Delta \Delta \Delta$


instruct, spondee.
 $\Delta \Delta$


continue, cretic.
 $\Delta \Delta \Delta$


instruction, molossus.
 $\Delta \Delta \Delta$

instrument,

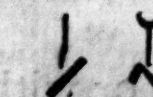

instrument, dactyl.
Δ .. Δ

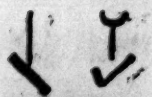

(to) *frequent*,
.. Δ

spondee.


(to) *produce*, iambus.
.. Δ


(adject.) *frequent*,
Δ ..


(the) *produce*, ditto.
Δ ..

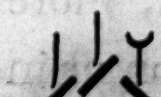

inspire, iambus.
.. Δ


product, ditto.
Δ ..


inspiration, dis-spondee.
Δ .. Δ ..


production, bacchic.
.. Δ ..


or, *inspiration*, ionicus à minore.
.. Δ ..


syllable, anapaest.
Δ .. Δ


vibrate, spondee.
Δ ..

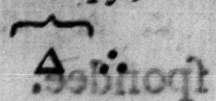

syllabic, dactyl.
Δ .. Δ


vibration, molossus.
Δ .. Δ

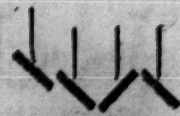
occupy.



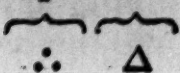
occupy, dactyl.



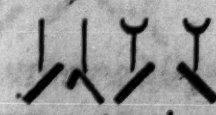
inspire, iambus.



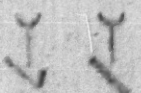
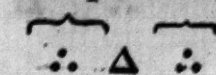
repetition, proceleusmatic.



produce, trochee.



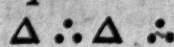
occupation, ionicus a minore.



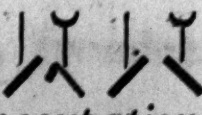
inspire, ionicus a minore.



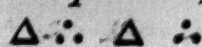
or, repetition, diambic.



produce, diambic.



or, occupation, diambic.



obdurate,



anapaest, or with the
pause ionicus a mi-
nore.

or thus, according to Milton,

P. L. b. I. line 58.



repeat, iambus.



inspire, iambus.



obdurate, amphibrachys.



The POIZE of syllables is the most determined accident in our language.

QUANTITY (or the *long* and *short*) is occasionally varied, more or less, in all words that may be spoken, either in common or in triple measure, which is probably derived from our language having four times as many different quantities as the Greeks had rules for*.

The

* The Greeks gave rules for the long quantity equal to two times, and the short quantity equal to one time. Only two proportions in all. The English language has at least eight different

The ACCENTS must always be liable to be changed according to the position of words, whether in *question* or in *answer*, in a *suspended* or in a *final sense*.

Besides these necessary licences of variation, there is also a manner of *gracing* the *tones ad libitum*, as in singing; by the use of what the Italian musicians call the *appoggiatura*, or *supporter*; which is a little (as it were superfluous) note, that the finger introduces, to slide up to, or down to, the real prescribed note of the song, and therefore might be called an *insinuator*. This *appoggiatura* being a grace *ad libitum*, the finger varies it in different ways at different times in singing the same tune. For example:

The upper line shews the *real* prescribed notes of the tune; the middle and bottom lines have exactly the same notes in large characters, besides the little *appoggiaturas* or insinuating notes, in two different manners; and that there should be no breach in the measure, the *quantities* of these little notes, be they more or less, are to be *stolen* out of the *great* ones.



different proportions of quantity; videlicet,

| = 1; | · = 1½; ʏ = 2; ʏ · = 3; ʘ = 4; ʘ · = 6; 𐀀 = 8; 𐀀 · = 12.

Or thus,

| = 1; | · = 1½; ʏ = 2; | + | · = 2½; ʏ · = 3; ʏ + | · = 3½; ʘ = 4; ʏ + ʏ · = 5;
ʘ · = 6; ʏ + ʏ + ʏ · = 7; 𐀀 = 8, &c.

For all these and more different proportions of time are employed either in syllables or pauses. And whatever is either taken from, or added to, the pauses, is either given to, or taken from, the syllables; so that all these various proportions may be necessary in well measured languages.

So in *speech*, instead of a plain *acute*, one may use a little *circumflexed grave-acute*, thus ✓, or sometimes *acuto-grave*, thus ^; and sometimes, instead of a plain *grave*, thus ^, or thus \.

I make this remark in order to shew, that different speakers, or the same speaker at different times, may all be essentially in the same *accentual tones*, though a little disguised by the use of graces or *appoggiaturas*; that is, like musicians severally playing the same air, though some grace it with variations, while others play only the plain notes.

Many of our words, especially those which consist of syllables joined by vowels, without the intervention of a consonant, may be pronounced either in two or in three syllables, and consequently may be either *dactyl* or *spondee*, as *various*, *curious*, *species*, in the foregoing list of words. Others also may be rated

either as *choriambics* or first *pæons*, as *impossible*, having the first

syllable longest, and the other three, though of different quantities, all shorter than the first, may be considered as a first *pæon*;

but if written thus, *impossible*, it will be a *choriambus*. Now to

note it under the Greek description of proportionate quantities, it could only be marked in this latter manner, since they only admitted their longest syllables to be valued as double to the short ones; but in the first manner of noting this word, the first syllable is in the proportion of three, the second of one, the third of one, and the fourth of two.

This, however, is a minuteness, and I may say an accuracy, which the Greeks did not enter into, though they knew their syllables were *long* and *longer*, *short* and *shorter*. And yet, in our method of dividing time, it is just as easy to be correct in marking every syllable to its true and just *quantity*, as it would be to follow the Greek method of rating *quantities* as equal, which they allowed at the same time were not equal.

In the foregoing list of words it will be seen, that the syllables in some *verbs* are of a different *POIZE* from the same syllable in the kindred *noun*. This useful distinction is, I believe, not of very long standing. I remember when it was in fewer words than it is now; and, I think, it is a good deal in the power of the learned, by art, to make it almost, if not quite, general.

P. 100. § 7. || "As to the variety of *loud* and *soft*, it must have been in their language as well as ours; but it was not affected to *syllables*, as with us, but belonged to *words* or *sentences*."

I know of no syllables in our language affected to *loud* or *soft* otherways than as the nature of the subject in discourse may occasionally require; and then assuredly it will be applied to whole *words* or *sentences*. I have taken some pains in sundry parts of my essay (p. 23. 29, 30.), and in my former observations (p. 88.), to shew, that heavy Δ and light $\cdot$ being obstinately and periodically fixed, are affections quite different from loud and soft; for no sentence can be pronounced without distinguishing the *poize* of syllables; whereas a whole narrative or reasoning discourse may pass without any variation of force

respecting loud and soft (vide p. 47. Mr. Garrick's manner of delivering *To be or not to be*).

P. 100. § 8. "As to what they called the *rhythm* of their language, which was composed of the *quantity of syllables*, &c."

I understand that the Greek *rhythmus* was composed of *metres*; that *metres* consisted of *single* or *copulated feet*; and that feet were composed of syllables, according to their quantities, long or short: and therefore, that the business of *rhythmus*, in gross, went no farther than to number the *metres*; and that it was the office of these latter to regulate *feet* and their *quantities*, in detail:

The Greek ideas of the duration of sound were derived from the actual lengths of their syllables. The shortest syllable was their standard for measuring all their other sounds. This standard was so much an object of immediate sense, that when they heard no articulate sounds, they seem to have had no rule or standard for measuring silence beyond the length of one syllable; and this happened more particularly, because their *rhythmical divisions* or *metres* always embraced a whole foot at least. And their *feet* being of various and *varying* lengths, their *rhythmical divisions* could never have been generally comprised, as ours are, within the periodical swings of a pendulum, or the equality of steps, which enables us to measure silences as accurately as sounds. But also from the same cause, the unequal length of their *rhythmical divisions*, they were unable to make an accurate measurement of syllables, and therefore were content

to let them pass as if they were always in the proportion of two to one, though they knew very well they were otherways. Whereas our *rhythmical divisions*, or *cadences*, consisting either of sounds or silences, being equalized by a pendulum or by our steps, enables us to compare and compute the proportions both of sounds and silences to a great exactness.

P. 103. § 9. ** “ But our accents differ from the Greek in two material respects. First, they are not appropriated to particular syllables of a word; but are laid upon different syllables, according to the fancy of the speaker, or rather as it happens, &c.”

I suppose there was a time when the Greeks had no rules either for *punctuation* or *accentuation* in their language, when perhaps the invention or the practicability of such rules were not thought to be possible, or to be useful if they were; nor, when they were first introduced, was it probably foreseen, to what perfection, by their assistance, their language might arrive. The foregoing list of words, *poized*, *measured*, and *accented*, shews that our language is as determined as the Greek, to have fixed accents. It is not in the indecise use of those properties that its imperfection lies. Time, aided by learned men with musical ears, may perhaps rub off some of its unnecessary, uncouth consonants.

As to the extent of our slides, so far from being generally less than a fifth, I observe, the common error is the other way; for there are few people that, without great attention, can confine themselves to such narrow bounds.

P. 104. § 9. note (*d*). "Relative to this there is a remarkable story.—Demosthenes, in asking the question of the judges, "whether Æschines was the friend or the hireling [*μισθωτός*] of

“ Alexander, barbarized on purpose, by laying the accent upon
“ the last syllable instead of the first, &c.”

To shew the possibility of a similar instance in our language, let us suppose a patriot, in a popular assembly, saying, "Sir, I would ask, whether we ought to look upon this peace-making minister as the disinterested friend of mankind, or the

“*pensionnaire* of our rivals?” To which the shouts of the assembly
would probably answer *rapidly* in plain English pronunciation,

“*Pensíoner, pensíoner.*” From which, I think, no other gram-

mathematical or critical consequence could be justly drawn, except that the patriot had flily affected a Gallicism in the pronunciation of a word, which, independent of * accentuation, was the same in both languages.

* Here, for want of a better word, I put **ACCENTUATION**, as a general term to include *accent, quantity, and poize.*

P. 105. § 9. †† “ Upon the whole, therefore, I am of
“ opinion, that very little can be made of the accents of our lan-
“ guage; and that to observe them at all is more a matter of
“ curiosity than utility.”

△ ∴
If we have no accents in our language, our discourse must be
monotonous; but, I thought, it was proved (p. 15.), that it was
not monotonous, not even on a single syllable. Or if it be

△ ∴
admitted that we have accents, but that they are useless, vague,

△ ∴
and arbitrary; then any provincial clown may accent his words

as properly as Mr. Garrick.

△ ∴
But if it be admitted, that a change of accent may alter the
sense of an expression (vide *interrogative* and *positive*, p. 136.);

△ ∴
and that Mr. Garrick may accent his words with more grace and

significant propriety than a clown, it should seem that a method

△ ∴
of accenting words and sentences, as pronounced by the most

△ ∴
correct speakers, ought to promise some future utility..

I hope these additional explanations, together with a review
of the whole treatise, which your l—p will find now more
enlarged.

enlarged, and more correct than the sketches of last year, will give you reason to alter your opinion.

We have a recent example of the powerful effects of musical rhythmus in the improvement of an art, with which, in the eyes of moderns, music was as little connected as with language.

Thirty years ago, military men considered music in no other light than as an amusement of parade to their corps; when one officer of uncommon genius, who still lives the ornament of his profession, began to use it as an engine of discipline, by engaging the minds of a body of men, through the force of melody, to attend to one thing; and after having so attached their attention by their ears, then to make them perform all their motions and evolutions under the instinctive power of whatever rhythmus he had prescribed to his musicians. It required no less than the unremitting perseverance of this able officer to stem the prejudices of vulgar minds against what appeared to them a puerile and visionary innovation. A few years, however, convinced the most obstinate; and ever since the commencement of the late war, not only the British regulars, but the militia also, perform their manœuvres and evolutions under the influence of melody and rhythmus, as well as the antient Greeks. Aristides says (lib. II. Meib. vol. 2d. p. 71.):

Ἐν τε τοῖς πολέμοις, ἐν οἷς μάλιστα εὐδοκίμησε καὶ εὐδοκιμεῖ, προσθήσω δὲ καὶ εὐδοκιμοίῃ, τὴν μὲν κατὰ πυρρίχην τῶν τακτικῶν μελέτην, ὡς διὰ μουσικῆς ποιεῖται, τί δεῖ λέγειν; πᾶσι γὰρ δήπερ ταῦτα φανερά· ἀλλ' ὁ τοῖς πλείστοις ἄδηλον, ἐν αὐτοῖς τοῖς ἀγῶσι, καὶ τοῖς κινδύνοις, τὰ μὲν διὰ λόγων πολλάκις ἀποδοκιμάζει παραγέλμαλα, ὡς βλάβη εἰ τοῖς ὁμοφώνοις τῶν πολεμίων διαγνωσθεῖη· διὰ μουσικῆς δὲ ποιεῖται τὰ σύμβολα ὄργανον

ὄργανον μὲν Ἀρχιόν τε, καὶ καταπληκτικὸν μετὰ χειρὶ ζομένη τὴν σάλπιγγα
 ἐκάστω δὲ παρεγλυψήματι μέρος ἴδιον ἀφορίζουσα. Ἐπιδρομῆς ὅν τῆς κατὰ
 μέτωπον, καὶ ἐφώδῃ τῆς κατὰ κέραις ἰδιάζοντα κατὰ λέταλαι μέλη· καὶ ἀνα-
 κλητικὸν ἕτερον· ἐξελίζων τὰ τῶν ἐπ' Ἀσπίδα ἢ ἐπὶ δόρυ πάλιν ἐκάστης
 ἴδια· καὶ πάντα ὅτως ἐφεξῆς περαίνει τὰ σοφίσματα, συμβόλοις τοῖς μὲν πο-
 λεμίοις ἀδήλοις, τοῖς δὲ φίλοις σαφεσέτοις τὰ καὶ δι' εὐχερείας γνωσκομέ-
 νοις. Οὐ γὰρ κατὰ μέρος τῶν διακέρων, ἀλλ' ἐχῆ μίαν τὸ σύμπαν ἐπελαι
 σύνταγμα.

“Also in war, it was, and is, in the greatest estimation; and
 “I may add, that so it ever will be; of the pyrrhic exercise in
 “tactics, which is performed by music, what shall I say?
 “Though it is openly seen by all, yet this (part) is from many
 “concealed; that, in engagements and hazardous enterprizes,
 “it often disapproves of giving verbal orders, from the danger
 “of discovering them to the enemy, if they should be of the
 “same tongue; therefore it gives symbolic signs by music,
 “making use of the trumpet, a martial and terrifying instru-
 “ment, and appropriating a peculiar piece (as a signal) for every
 “different (order or) admonition. So for a charge in front, and
 “for an attack in flank, particular tunes are appointed; and
 “another for the rally. Again, when chusing (to appear) in
 “shields or with spears, there is a different air for each. And
 “so for the rest, it performs them all by signals unknown to the
 “enemy; but to their friends most manifest and intelligible.
 “Not (waiting) to be heard from man to man, but (warned)
 “by one sound, the whole regiment moves on together.”

As I have cited the whole passage in the original Greek, it will
 not be suspected that I have copied this from the discipline of

our light cavalry, among whom, it must be confessed, this pyrrhic exercise seems to be thoroughly established. But if any one thinks it was much more excellently performed by ancient Greeks than by modern Britons, he may use his endeavours to prove that fact as well as he can, without taking away from the present professors of the art, the merit which they really have in improving our tactics. In like manner, I would intreat all passionate lovers of the *Greek* language, to content themselves with admiring the elegance of their mistress's dress;—how gracefully she *lengthened* or *shortened* her robes;—where she pinned her *accent*;—and how she *poized* her *emphasis*. But why must they attempt to strip our poor *mother tongue* of those necessary parts of her cloathing, to which she has as natural a right as the *Grecian lady*? The native rudeness of her shape, and the hitherto neglect of her education, were not her faults, but her misfortunes; which it is the duty of her learned sons to endeavour, rather to correct, by insinuating arts and gentle admonitions, than to dispute her legal rights, and to disparage her by humiliating comparisons.

P. 105. § 10. “As to the rhythm of it, I think it must consist
“in one or other, or of all the four following things; the quan-
“tities of the syllables; the variety of loud and soft; the pauses;
“and lastly, your divisions into bars, &c.”

(In my answer to your l—p's former remarks, I certainly pointed out in manner of a demonstration (see p. 87.) that *cadence* being *empbatically* divided into the *heavy* and the *light*, was the ONLY *essential* governing power of *rhythmus*.

Quantity,

Quantity, which is only subservient to *metre*; or, as I may say, to the *metrical* division of *cadence*, has no more to do in the definition of *rhythmus*, than a closet has to do in that of a house, which may be either as a barn, without any interior division, or as a church with a hundred pews, or as a dwelling-house, divided according to the conveniency of the master: therefore, the *essence* of *rhythmus* does not lie in *quantity*. Nor in *loud* and *soft*; for a whole discourse may pass without any such variety (see remark on Mr. Garrick's speech in Hamlet, p. 47.).

Nor in *pauses*, which are only as portions, or a portion, of *quantity*, not employed in sound, but in a silence, like an empty room in a house, or a vacant house in a street.

As to *bars*, though I have frequently made use of the word as synonymous with *cadence*, in order to be the better understood by musicians; yet, I must own, it was an error against precision, for which I hope I shall be excused by philosophers; who will perceive, that a *bar*, properly speaking, is only the graphical mark of the beginnings and endings, or of the boundaries, of *cadence*: whereas *cadence* itself is an essence, co-existing with articulate sound, the subject both of sense and intellect, independent of any mark on paper: and in this sense, *bars*, as the typical marks of *cadence*, may figuratively be said to be the essential or constituent parts of *rhythmus*; which I would have always understood to be an instinctive sense and idea of dividing the duration of all sounds and motions, by an equal periodical pulsation, like the oscillations or swings of a pendulum.

P. 106. § 11. "As to quantity, though we have undoubtedly
 "some syllables in our language much longer than others; yet I
 "have always been of opinion, that it made no part of the
 "rhythm of our language; and that it was a vain attempt to
 "endeavour to reduce our compositions to metrical feet, &c."

RHYTHMUS takes notice of no *quantity* less than that of a
 whole CADENCE. The several examples which I have set, with
 the notes of *accent*, *quantity*, and *poize*, are as strong proofs as
 any we have from the Greeks, that our compositions are reducible
 both to *metrical cadences* and *feet*.

A person not initiated in the practice of music will not easily
 perceive the difference in *quantity* between *crotchets* and *quavers*;
 nevertheless, their proportion to each other is as two to one;
 much less will such a person be able to distinguish the difference
 between the *specked crotchet* and the *plain crotchet*, which are to
 each other as three to two. But notwithstanding this want of
 distinction in a person unpractised in the art, the art itself is
 perfect, and those who are versed in it find no difficulty to
 distinguish and evaluate notes so minute as twenty-four or thirty-
 two to a second of time. It would be very unjust to say there
 could be no distinct power of description in the language of
 Japan, because I did not understand it, and that all their words
 seemed to my ears to sound exactly alike. Your lordship has
 well proved, that language is an art; but it is an art that we
 learn (to speak in the vulgar phrase) very naturally; that is, by
rote. Many people learn music nearly in the same manner,
 especially singing; and both those who talk by *rote*, and those
 who

who sing by *rote*, are often proficient in practice, without knowing that those arts are capable of rules and of very subtil analyzation, any more than a child of five years old comprehends, or can explain, how he stands and walks. All the languages in modern Europe have a plain traditional descent from those of two or three thousand years ago. The organs of mankind, their faculties, and their aptitudes, are still the same. The chain of communication from Aristotle to your l—p consists only of forty links of about fifty years for each. What ground have we to suppose, that those necessary materials of language, *accent*, *quantity*, and *poize*, so remarkably cultivated by the Greeks, should be lost in so short a passage, as through a line of forty lives? Instead of losing, we might have acquired more properties, if language had been capable of more than what we have; since it is almost clear, that ours is a compound of all that existed within the extent of the Greek, Roman, and Gothic empires.

Our pedestrian performers on the harp, pipe, and fiddle, are seldom farther advanced in the literate art of music, than Europe is in the musical part of language; that is, unconscious of notes or any scientific method, they are all talking and playing by *rote* and by *ear*, or, in the more vulgar phrase, by *air*.

There was a time when the Greeks, in regard to their language, were in the same situation; for we are told, *accentual* notes were not used by them till long after the days of *Homer*.

Now when an unlettered harper or piper, though perhaps of extensive fancy and great execution, meets with an inferior player possessed of the art by notes, it humbles the pride of
his

his native talent, and he submits to the lettered man as his master.

This, then, is the state of the art between these two men: we will suppose the ignorant player to be the best performer, but that he conceives not the possibility of reducing his musical ideas to rules of art, or of communicating them to others by words or writing; while the other, by setting down all the wild notes of the unlettered man, convinces *even him*, that the rules existed, ⋮ Δ although *he* knew them not. Δ

P. 108. § 14. "As to our verse, there is one part of its
"rhythm which every body perceives; and that is the equal
"length of the verses. That arises from their consisting of the
"same number of syllables; ten, for example, in our hexameter
"verse: nor can this be dispensed with."

The lengths of verses or lines of poetry are no necessary constituent part of *rhythmus*; for though every line should be composed of regular *metres* or *cadences*, yet the *rhythmus* will be good, whether the number of *cadences* in each line are equalized or not, as in the species of poems called *Odes*. But a line may consist of *ten syllables*, which, for want of the proper *poize* or the proper *quantities*, cannot be reduced to *metrical cadences* without great assistance from pauses, or changing the position of the words, and of course will not be a *rhythmical verse*.

As instances of this, I will here give some lines from the first book of Milton's *Paradise Lost*, which assuredly want
the

the assistance I have mentioned, to make them rhythmical verses.

Line.

122. Irrecon | cileable | to | our | grand | foe.
 Δ ∴ Δ ∴ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

159. To | do aught | good, | never will | be our | task.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ ∴ Δ ∴ Δ ∴

Or thus, transpose NEVER,

To | do aught | good, will | never | be our | task.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

160. As | being | the con | trary | to | his high | will.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

But in modern language, this method of pronouncing CONTRARY
 is only used among vulgar people; therefore it should be thus:

As | being | the | contrary | to his | high | will.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ ∴ Δ ∴ Δ ∴ Δ ∴

248. Whom | reason | hath | equall'd, | force hath | made su | preme.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

402. His | temple | right a | gainst | the temple | of | God.
 Δ ∴ Δ ∴ Δ ∴ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

406. Next Chemos, the ob scene dread of Moab's sons.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

452. Of Thammuz yearly wounded; the love- tale.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

470. He also a gainst the house of God was bold.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

472. Ahaz, his sottish conqueror, whom he drew.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

490. Belial came last, than whom a spirit more lewd.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

499. Of riot ascends a bove their loftiest towers.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

509. Gods, yet confessed later than heaven and earth.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

554. Deliberate valour breath'd, firm and un mov'd.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

558. Anguish, and doubt, and fears, and sorrow, and pain.
 Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴ Δ ∴

562. Their painful steps o'er the burnt soil: and now.

584. Damasco, or Morocco, or Trebi fond.

592. All her original brightness; nor appeared.

594. Of glory obscured: as when the sun new risen.

622. O! myriads of immortal spirits! O! powers.

632. That all these puissant legions, whose exile.

682. The riches of heaven's pavement trodden gold.

704. Severing each kind, and scumm'd the bullion dross.

Or, Sever'd each kind, &c.

710. A non, out of the earth a fabric huge.

735. And sat as princes; whom the supreme king.

737. Each in his hierarchy the orders bright.

753. Of fovereign power, with awful ceremony,

756. At Pandemonium, the high capital.

758. From every band, and squared regiment.

Measured lines of whatever lengths, are, or may be, what I call *rhythmical clauses*; and are otherwise distinguished both in antient and modern language by the names of *hexametres*, *pentametres*, *tetrametres*, &c. If it were not for the rhymes in modern poetry, the ear would never discover the ends of verses, when properly pronounced; because the *rhythmus* never stops, not even at * pauses, which would be tiresome and offensive if we

* For though there is a discontinuance of sound, the *rhythmus* is continued to the end of the piece; and by that continuance every *pause* is measured.

always found them at equal and periodical distances; and hence it is, that the cæsure is never offensive in blank verse (see lines from Milton, p. 77.). If the *octometres*, which I have given (p. 80, 81.) from the *Aeneid* and *Iliad*, are read by my notes, the ear will not discover the ends of the lines by an equality of periods.

Our language which (to speak according to the Greek prosody) abounds with *iambics*, *trochees*, *spondees*, *dactyls*, and *anapaests*, makes agreeable *hexametres* with five cadences of words, and the quantity of one more left for pauses.

But the precise number of TEN syllables are not always the necessary complement of the five cadences of words; for if there are dactylic feet, the number of syllables may be increased without any injury to the measure. As for example,

1st.	2d.	3d.	4th.	5th.	6th.
trochee	trochee	dactyl	anapaest	spondee	iambus.
3	To	all in	fe rior	animals	it is given.
Δ ∴	Δ ∴	Δ ∴ ∴	Δ ∴	Δ ∴	Δ ∴

A *minim rest* or silence, together with the syllable *to*, makes the first cadence a *trochee*. In the fourth cadence, the word *ANIMALS*, by itself, is an *anapaest*; but to give a denomination to the whole cadence, which includes a *rest* or silence of a *crotchbet*, it should be called an *ionicus à minore*. The word *GIVEN* in the sixth cadence is an iambus; but to give a denomination to the

whole cadence, which has a *trochee* in silence, we must call it an *antispast*.

The above line, if read as noted, is a good *bexametre*, not *alexandrine*, and yet has THIRTEEN syllables. And as a proof that our language has syllables affected to *quantity* as well as to *accent* and *poize*, the word ANIMALS, though of three syllables, was not long enough to make up the measure of the *cadence* without the *crotchet rest* which follows it; and the monosyllable ALL in the *second cadence* is exactly as long as the three syllables of ANIMALS. Again, the monosyllable IT in the *fifth cadence* was not long enough to stand for half the *spondee*, without the aid of the *quaver rest* which follows it.

If authorities can be quoted against these opinions, to shew, for example, that IT may be *long* and ALL *short*, we must be obliged to acknowledge, we have many examples of bad writers, and bad readers, and bad men, who pay no regard to *accent*, *quantity*, *poize*, *decency*, good order, or common honesty; but, notwithstanding all violences and irregularities, *accent*, *quantity*, *poize*, order, *decency*, and honesty, have still an essential existence, in the language and manners of mankind.

Several of our monosyllables, such as *our*, *hour*, *torne*, *worn*, *borne*, and the like, are so long as that any one of them with eight other syllables will make an unexceptionable *bexametre* line. However, these long syllables so employed have evidently the effect, and nearly the same sound, as two syllables, though in other lines they can be sounded as mere monosyllables.

EXAMPLE

EXAMPLE OF A LINE OF NINE SYLLABLES IN SIX CADENCES,
COUPLED WITH AN ALEXANDRINE OF EIGHT CADENCES.

3 So Britain, worn out with crops of men

Must now be, stock'd with brutes, a wilderness a gain

P. 109. § 15. "The mixture of loud and soft.—This is
"so essential to our verse, that if the sense require that an
"emphasis should be laid upon the soft syllable it evidently mars
"the verse, &c."

In this observation, two things, distinct in their nature, seem to be confounded together, *poize* and *force*.

Loudness of speech, whether on syllables, words, or sentences, must always be *ad libitum*, and is therefore an *accident* different from, and independent of, *emphasis* or the Δ *heavy poize* of a syllable, which is never *ad libitum*, but positively fixed in all words, except monosyllables. For if *loudness* be required on a particular word or sentence, it should continue uniformly on all and every one of the syllables of that word or sentence; whereas *emphasis* or the Δ *heavy poize* is confined to a single syllable, or to half

half a cadence at most, the next syllable or next half cadence requiring absolutely the *unemphatic* or $\therefore$ *light poize*. We have

proved by a clear example (see p. 88. *my dear*), that the Δ *heavy*
 “ ”

syllable may be (,) *soft*, and the $\therefore$ *light* syllable (e) *loud*.

Now all our *polysyllables*, except those which may be contracted into *monosyllables*, have their *poize*, for the most part, unalterably *fixed*; so that wherever they are employed in poetry or prose, whether intended to be spoken *loud* or *soft*, the words should be so arranged, that they may be pronounced, without violence, according to their proper *poize*. And a writer must have but little skill or a bad ear, who cannot always affect this, since almost all the *monosyllables*, with which our language abounds, are so *pliant* as to submit, according as the case may require, to either the $\therefore$ *light*, or Δ the *heavy*. But the words *SOIL*, *TOIL*, and some others seem absolutely heavy; for which an exception should have been made in p. 133.

I observe your l—p thinks the word *first*, in the first line of the *Paradise Lost*, should be read ($\therefore$) *light*, which I have marked Δ *heavy*. As it is not my intention in this treatise, to decide magisterially on the certain pronounciation of any word, which, in the several parts of this island, may be understood to be the same, though very differently sounded, I will not insist on the rectitude of the expression which I have applied to that or any other syllable; my design being principally to shew, that all the necessary expressions, or accidents of elocution, may be reduced to rule, and committed to writing, by these legible symbols.

However,

However, if my judgement was erroneous in the above mentioned instance, I will just mention what led me into it.

I thought so great a poet as Milton would not have put an

unmeaning expletive in the first line of his poem; but that,

on the contrary, he meant to point out *emphatically* (not loudly)

what particular act of man's disobedience it was, which had

drawn on him and his race so heavy a punishment, and there-

fore I marked it, of man's first disobedience; neither do I

see any reason for bringing the accidents attending the syllables in the first line of a distich to tally numerically with those of the second: for in that case, the cæsure must always be in the same periods of both lines, which your l—p justly remarks as a great fault in French and English poetry; though, I think, it does not necessarily happen in the latter. And M. Voltaire has

has avoided it, in some degree, since he has adopted our ten syllable measure *.

P. 110. § 16. ¶ “As to quantity, it is certainly not essential to our verse; and far less is accent.”

If your l—p’s opinion prevails here, it will destroy my whole fabric. But having laboured to ascertain and explain these essential accidents of our language by legible notes; and to prove the truth of their existence, by experiments submitted to our vulgar senses, by the aid of a bass viol or *pitch-pipe*. I must now call the several examples, which I have made the subjects of those experiments, FACTS; and those *facts* only, without farther words, are all I shall here oppose to your l—p’s opinion on this head.

* The greater number of monosyllables in English, being in proportion as 3 to 2 more than in French, gives our language a considerable advantage over theirs, in changing the place of the cæsure, as well as in the disposition of cadence and quantity. And considering how much both languages are embarrassed with necessary consonants (besides the useless ones), if they had not had a great proportion of monosyllables, their versification would have been much worse. In English, the proportion of monosyllables to polysyllables is more than as 5 to 2. In French something less than as 3 to 2. But in Italian, which having more vowels has less occasion for monosyllables, their proportion to polysyllables is not quite 3 to 4, or $1\frac{1}{2}$ to 2. The superior melody of one language over another will be nearly in proportion as the one exceeds the other in the number of (vowels or) vocal sounds. The number of vocal and consonantal sounds in Italian are nearly equal, or 54 consonants to 53 vowels; in Latin 5 consonant to 4 vowels; in French, supposing the orthography not as written, but as sounded in pronunciation, the consonantal to the vocal sounds are as 4 to 3; and in English, in the like manner, the proportions are as 3 to 2. Therefore, in this view, the French has an advantage over the English in the proportion of 9 to 8; but this is over-balanced by the English advantage in its monosyllables, which it has more than the French in the proportion of 5 to 3 or 10 to 6.

P. 110. § 16. ||| and *** “The pauses, as I have observed,
 “cannot stand for any part of the verse, nor supply the place of
 “a single syllable.—At the same time these pauses are a very
 “great beauty, particularly in our blank verse, filling up a
 “considerable part of the time; and therefore, are very properly
 “considered as a part at least of the time of the verse, if not
 “of the verse itself.”

Your l—p says enough here to shew the use and importance
 of pauses; they certainly have the same use in rhyme as in blank
 verse. The foregoing examples give proofs.

P. 110. § 16. ††† and ‡‡‡. “Certain syllables of certain words
 “had particular tones appropriated to them.—Our compo-
 “sition can be little or nothing improved in that way.—And as
 “to rhythm, we have not what they called rhythm, arising
 “from a certain composition of long and short syllables, &c.”

The specimens I have given (in p. 136. & seq.) prove, that
 we have our appropriated tones as well as the Greeks. But in
 order to know whether our tones in general are, or are not,
 capable of improvement, let any man, in his travels through
 this island, take down, by these rules, the several provincial
 tones. Then, comparing them with one another, and with
 that of the metropolis, he will find a considerable variety among
 them; and some, he will probably think better than others:
 surely then it will follow, that the tones which he does not
 approve of, may be altered for the better, by adopting the most
 approved accentual sounds in their stead.

As to *rhythmus*, there is not the least room to doubt, but that we have as absolute *quantity* in our language as the Greeks had in theirs; and that their *rhythmus* was governed by the *poize* of *arsis* and *thesis* is testified by all their writers, as ours is by the same thing, only changing the form of the members from *metres* to *cadences*, which are more exact (see p. 113, 114, and 115); and in that we have the advantage of effecting the same thing with less labour. *Quantity* never governed *rhythmus*; but was as subservient to it as materials are to the building of an edifice: wherein it is the business of the workman to chuse the materials that will fit, and not to accommodate the size of the apartments to the dimensions of the bricks and stones. And here we may shew one of the uses of our *pauses*; for if a syllable is too short, we may supply its deficiency by a *pause*, by which means an *iambus* or *trochee* may answer to fill a *cadence* as well as a *spondee*. Of this examples may be found among the foregoing. I make no doubt, but many instances may be adduced, where both *poize* and *quantity* have been violated by our best poets; but a poetical licence, the offspring of hard necessity, is not a sufficient authority to deny or disown the laws of nature. For though speech is artificial; yet *accent*, *quantity*, and *poize*, are natural principles, without which it could not be constructed.

P. 111. § 16. ||||. "In short, the Greek language was the
"work not only of grammarians and philosophers, but of
"musicians, &c."

I do not pretend to set up *our language* as any thing like a
rival to the *Greek* in its *grammatical*, *etymological*, or *orthogra-*
phical

pbical frame and construction; but certainly, the accidents of *melody* and *rhythmus* are not peculiar to the *Greek*: they are *common* to the *English* and to all the languages that I know any thing of, or ever heard pronounced.

When a man studies the character and manners of an ancient worthy, the utility he may and should draw from that study, is to form his own morals, as near as the difference of times and places will permit, by the imitation of so excellent a model. It is not in our power to make the Greek our national language; but it is certainly in the power of learned men to make great improvements in that we have. Your l—p's masterly observations on the Greek language give us room to think, you understand it more critically than even your native tongue; which is far from being my case. I just know enough of it to perceive how much better its properties were understood, cultivated, and methodized, by its grammarians, poets, and musicians, than has happened to any other language within my knowledge. But as, in comparison with the Greek, all the languages in modern Europe are involved in the same disgrace, among which our own holds at least a middle rank, let me presume to offer the following hypothesis as their apology.

While the Greek poet and musician was one and the same person, he took great care to make his musical fancy so far subservient to his poetical, that neither the *accent*, *quantity*, or *poize* of a syllable should ever be violated. But when the two professions came to be separated, then, I can suppose, the musical composer, more partial to his own, than to the composition of the poet, gave preference to a pretty

musical idea, though it might run counter to every accentual property. This abuse, I presume, was so thoroughly established before the revival of the arts and the invention of our modern scale and modulation, that no mere composer of music felt, or feels, any concern about *lingual accent*, *quantity*, or *poize*; but is quite indifferent whether, in compliance with his musical whim, he extends a single syllable to the length of 20 *cadences*, either on a single tone, or articulated into 160, through all the extent of the voice; or whether he crams 8 or 12 syllables (which might in their natural quantities be *spondaic*) into the narrow compass of one cadence (see p. 66. *folly*). Now, admitting this supposition, let us state the natural consequences of the *ANTIEN*T and of the *MODERN* poetico-musical composition. The *ANTIEN*T Greeks, always accustomed to hear the same accentuation of their language, both in common discourse and in musical melodies, were never led astray; but became, by habitude, to know as familiarly the *accentual* and *rhythmical* properties of every word, as we do, now-a-days, the like qualities of every common hacknied tune; in which nobody, that has any ear for music, is materially mistaken. But as to *MODERN* languages, their *accentual* and *rhythmical* properties being continually violated by musicians, it is no wonder, that even learned men have been hitherto so far misled as not to perceive that they have precisely every *accentual* and *rhythmical* property that the Greeks had; properties which must necessarily belong to all languages whatsoever.

Thus, when things arrive at a certain point of perfection, luxurious refinements in great communities seldom fail to lead them

them into error and confusion. The physician, quitting his pharmacy, trusts the life of his patient to the hazardous handling of a second-hand profession. The lawyer, no longer composing his own pleadings, lifeless in the cause, blunders through the blunders of a subaltern blunderer.

So the Attic or Roman poet, who first submitted the *poizing* and *accentuation* of his language to a mere musician, laid the foundation of our lingual disgrace. To rectify which, there is no method so sure as to adopt, in that particular, the *ancient Greek* prudence, under which the study of music and letters were intimately blended together. For if we think it necessary to instruct our children by a dancing-master, in the rhythmical art, to enable them to move and walk more gracefully than the untutored peasant; why, since language depends both on rhythmus and melody, should we not also teach them to read under the rules of music, that their speech may be as graceful and as proper as their movement? All that part of language which belongs to its utterance, is intirely to be regulated by the rules of music; that is, of melody and rhythmus: how then is it possible, to bring that part of it to the perfection it may be capable of, if our men of letters are so ignorant of it, as to doubt or deny its existence?

In fine, if we would know, we must first learn; and

if we wish to improve our language, the grammarian, the poet, and the musician, must again be united in the same person..

POSTSCRIPT.

P O S T S C R I P T.

WHILE the fourth part of this Essay was in the press, the old proof sheets of the three first parts were sent to the Author of the *Origin and Progress of Language*, with a letter, observing, that as there were in those three parts some additions and corrections beyond what he had seen, his l—p, might on the perusal, find something to answer the objections, and remove the doubts expressed in his last observations. To which his l—p replied:

S I R,

IHAD the favour of your letter by Mr. — with your printed sheets; for which I think myself much obliged to you. You have added, I see, more examples and illustrations; and the public is obliged to you for your fair dealing, in publishing what may be said against your system as well as for it; so that every man may judge for himself. Whether what I have said by way of objection, will be thought to have any weight, I know not; but I am sure, that I am obliged to you for the honourable mention you have made of the Author of the *Origin of Language*. What further has occurred to me, upon reading your printed sheets, you have in the enclosed paper.

I am, with great regard and esteem, &c.

To J—S—, Esq; Margaret Street, Cavendish Square, London.

THE OBSERVATIONS INCLOSED IN THE FOREGOING LETTER.

“THE nature of your work, as I understand it, is to com-
 “pare the melody and rhythm of music with the melody
 “and rhythm of language; and to try how far the rules of both
 “these in music may be applied to language. A speculation
 “certainly very curious, and which, I think, may be also useful;
 “inasmuch as the melody and rhythm of music are more accu-
 “rate, and governed by more certain rules, than those of even
 “the most perfect languages. As to the *melody* of language,
 “there is a difference, which you acknowledge, betwixt it and
 “the melody of music; namely, that the latter proceeds by
 “greater intervals, distinctly marked, and therefore is what the
 “Greek writers call *diastematic*: whereas the music of speech
 “proceeds by very small and inappretiable intervals, the voice
 “never resting upon any one tone, but going on in a continued
 “flow, or *ῥοις*, as they called it; and from thence they gave it
 “the name of *συνεχὴς*, or *continued*, in contra-distinction to the
 “*diastematic*. And so far you are certainly in the right. As to
 “*rhythm*, you seem to think, that there is no material difference
 “betwixt the rhythmus of music and that of language. For,
 “according to your system, there is *common* and *triple* time in
 “each; they are both divided into bars, and the pauses of each
 “make part of those bars. And here, I think, lies the great
 “objection

“ objection to your system: for, till I shall have seen what you
 “ have written, I must still continue to doubt, whether there be
 “ any other division of the sound of language than, first, what
 “ is common to all languages; *viz.* the pauses which the sense
 “ requires; secondly, the division into feet, consisting of certain
 “ combinations of long and short syllables, which is peculiar to
 “ the learned languages; and, thirdly, the combination of loud
 “ and soft syllables, which makes what we call the *feet* * of our
 “ English verse, and may, I think, also be applied to the rhythm
 “ of our prose. Besides these, I, for my part, perceive no other
 “ rhythm in speech. At the same time, I am far from setting
 “ up my perceptions as a rule: for I am sensible how much they
 “ are governed by custom, of which we need no other proof
 “ than that we certainly have not the same perception of the
 “ division of language into combinations of long and short syl-
 “ lables (that is, metrical feet), as the ancients had†; because
 “ having no such rhythm in our language, our ears are not
 “ accustomed to it. † That language may be divided into bars
 “ as well as music, you have shewn very evidently; and it is
 “ likely, that a well-taught ear, such as yours, will perceive
 “ that division, and will measure speech by it as well as it does a
 “ tune. It may also perceive, that those bars proceed either by
 “ common or triple time. But I much doubt, whether any
 “ man, that is not a musician, can be made to perceive it; the
 “ consequence of which is, that it will be of no use. It may,
 “ however, be true, that though the division itself may not be

* This and the following marks, in these observations, refer to the answers which follow them.

.(a) Vide p. 119 to 121. 136 to 144.

“ perceived

“ perceived by any but those of learned ears, yet the effects of it
 “ may be felt by all. For this is generally the case of the
 “ popular arts, of which every body feels the effects, but only
 “ the learned know the causes which produce them. As to
 “ music, I am convinced, that the division of a tune into bars,
 “ whether in common or triple time, is absolutely necessary.
 “ Now if the reason of this could be shewn, we should be able
 “ to judge, whether that reason would not likewise be applicable
 “ to speech. You seem to think it difficult, if not impossible,
 “ to discover this reason; and if it be impossible to you, I am
 “ persuaded it is to every other. But it is certainly possible to
 “ be sure of the fact;—I mean, || whether a speech, composed
 “ in such a way as not to be capable of a division into bars, will
 “ not offend the ear as much as music so composed. And if
 “ that be the fact, I shall be satisfied, without knowing the
 “ cause; though I should be obliged to confess, that I have
 “ spoken all my life in musical bars, without knowing that I
 “ did so, like the *bourgeois gentilhomme* you mention in Moliere,
 “ who had spoken prose all his life without knowing it.

“ Before I quit this subject, ** I must own myself fully con-
 “ vinced, that the pauses make an essential part of the rhythm
 “ of speech; and that if a man in speaking, stops where he
 “ should not, or stops too long or too short, he will not only
 “ offend the understanding, but the ear; and our notation of
 “ these stops in writing is imperfect, inasmuch as they only
 “ mark that one pause is greater than another; but do not let us
 “ know by how much, or in what proportion, the one is longer
 “ than the other.

“ As to the Greek language, the knowledge of its accents and
 “ rhythmus does not belong to your general system, any farther
 “ than as it may serve to explain and illustrate your theory.
 “ Till I see more of your sheets, I shall believe, that the tones of
 “ the Greek language were altogether different from the tones of
 “ English; or of any other language now spoken in Europe, in
 “ this respect, that each word in Greek, pronounced by itself,
 “ and without the least degree of passion or sentiment^(b), had an
 “ acute accent upon one particular syllable of it, just as much as
 “ any English polysyllable, pronounced by itself, has one syl-
 “ lable sounded louder than the rest. The modern Greeks have
 “ lost those tones, and in place of acute and grave have substi-
 “ tuted loud and soft ††; for they constantly sound every syllable
 “ loud which is marked in the Greek books with an acute accent,
 “ which makes their pronunciation resemble more that of the
 “ English than of any other language in Europe. In this man-
 “ ner, I imagine, the single Greek word was pronounced; and
 “ in composition, whether the speaker spoke loud or soft, or in
 “ whatever tone or passion, still the elevation of the tone upon
 “ the accented syllable was observed^(c).

“ And here there occurs a problem well worthy the considera-
 “ tion of such a musician as you; viz. wherein the difference
 “ consists betwixt the tone of passion †† and the musical tones of
 “ acute and grave? That there is such a difference I hold to be a
 “ certain fact. |||| For one man will sing a tune so as to make it
 “ touch the heart of every body who has any feeling; while

(b) Vide p. 136, English words have the same.

(c) It is the same in English.

" another shall sing the same tune, the same notes, the same
 " rhythm, and in the same key, but without any expression.
 " Now I should be glad to know, what makes this difference.
 " Is it, that the one voice is clearer, sweeter, or more liquid
 " than the other? Or is there something more than all that?
 " There is another thing concerning the Greek language, of
 " which I should be glad to have your opinion; *** whether I
 " do not carry the doctrine I have learned from you, of the slides
 " of the voice in speaking, too far, when I suppose, that the
 " Greek acute accent did not rise at once upon the accented
 " syllable; but was rising gradually upon the preceding syllables,
 " and only came to its greatest height upon the acuted, and fell
 " down again in like manner upon the succeeding syllables.
 " This is a conjecture I proposed in the last observations I sent
 " you, and I hope you will favour me with your opinion of it^(d).

" I have only to add, that I am very sensible of the truth of
 " what you hint in your last letter, that I know not enough of
 " the practice of music to be able to judge rightly of your system.
 " But though my curiosity be very great, I am afraid that I am
 " too late in life to learn that, or any thing else, of which I
 " know nothing at all. I have a very high opinion both of the
 " theory and practice of music. As to the theory, I am clearly
 " of the opinion of the Pythagoræans, that all nature is music;
 " that is, numbers and proportions. Every philosopher, there-
 " fore, should study the theory of it: and as to the practice,
 " I hold it as a part of a liberal education to be taught it more or
 " less. This, at least, was the opinion of the ancients. In

(d) See p. 142. the words *comparable*, *constituent*, *Constantinople*, and p. 143. *syllable*.

" Athens, every gentleman learned grammar, music, and the
 " exercises of the *palestra*; and, I believe, it was so likewise
 " among the Romans, after they ceased to be barbarians. In
 " this country we are taught grammar at school; but not near so
 " well as you are in England. The exercises are almost gone
 " quite out of fashion among us; and, I believe, it is no better in
 " England. And as to music, it never was any part of a liberal
 " education here; and for that reason I know nothing of it,
 " except a little of theory, which I have taught myself."

LETTER

LETTER TO THE AUTHOR OF THE ORIGIN AND PROGRESS
OF LANGUAGE.

* * * *

Margaret Street, Sept. 23, 1775.

YOUR l—p's favour of the 21st ult. with your last observations, is come to my hands; to which I have given the best answers in my power. But as they refer to many passages in the fourth part, which your l—p has not yet seen, I send you six more of the proof sheets, and I hope I shall be able to present your l—p with the whole in about a month. My printer, careful to avoid errors, does not finish more than a sheet in a week; notwithstanding which, several have escaped our vigilance.

I have mentioned in a former letter to your l—p, that "nothing can tend so much to elucidate any subject as the queries of an ingenious doubter." And it is natural to suppose, that some or all those which your l—p has made, would have come into the minds of other ingenious men: therefore, as my design was to find out and establish *a truth*, I was very well pleased to have them fully stated, that I might have the opportunity either of correcting myself, or of obviating all other probable objections by my answers to *them*. In doing which, I

∴ Δ

Have

have experienced the insufficiency of my abilities to explain new ideas that required the utmost clearness and precision of words: for having set out at first too concise to be intelligible, I am now under the necessity of making repetitions to clear up the obscurities of my former brevity.

I am, with great respect, &c.

Margaret Street, Sept. 23, 1772.

Y OUR I—p's favour of the 21st ult. with your last observations, is come to my hands; to which I have given the best answers in my power. Thus as they refer to many passages in the fourth part, which your I—p has not yet seen, I send you six more of the proof sheets, and I hope I shall be able to present your I—p with the whole in about a month. My printer, careful to avoid errors, does not finish more than a sheet in a week; notwithstanding which, several have elapsed our vigilance.

I have mentioned in a former letter to your I—p, that "nothing can tend so much to elucidate any subject as the practice of an ingenious doubter." And it is natural to suppose, that some or all those which your I—p has made, would have come into the minds of other ingenious men: therefore, as my design was to find out and establish a way, I was very well pleased to have them fully stated, that I might have the opportunity either of correcting myself, or of obviating all other probable objections by my answers to them. In doing which, I

have

ANSWERS

ANSWERS TO THE OBSERVATIONS IN THE POSTSCRIPT.

PAGE 176. * "The combinations of loud and soft syllables, which makes what we call the feet of our English verse, &c."

My system admits of no such *rhythmical* distinction as that of loud and soft syllables, nor of feet so formed. I was in hopes what I have said in p. 12. 19, 20. 22 to 24. 27. to 32. 68. 77. 86 to 89. would have convinced your l—p of the necessity of calling these perceptions, being manifestly different, by different names (see also p. 115. 117 to 120.). Your l—p cannot think that the Greeks meant THESIS to signify *loudness*; or ARSIS, *softness*. The emphatic distinction among syllables, which I call the POIZE, occurring periodically, and divided alternately into *heavy* and *light*, was certainly what they understood by THESIS and ARSIS. They felt the emphatic power of the THESIS, which I call *heavy* Δ; and by that feeling, or *impulse*, they were governed in the Ἀγωγή ῥυθμική^(a); or *rhythmical* DRIFT of the tune or verse; that is, in the quality of the *metres*, *triple* or *common*, as well as in the degree of velocity; and this was clearly pointed out by the words Ἀγωγή ῥυθμικῆς ἐμφάσεως, the DRIFT of *rhythmical emphasis*.

Now if this THESIS, or *emphatic impulse*, which is *sensibly expected* in every *metre*, and which, in my system, lies on the

(a) Aristid. Quint. lib. I. Meib. vol. II. p. 42,

first *sound* or *silence* of every CADENCE, is not distinguished from *loudness*, which means a *force of sound* uniformly exerted, and not a periodical and alternate change by intermissions, such as the POIZE of *heavy* and *light*; I say, if two affections, so palpably different, cannot be distinctly comprehended and described by appropriated terms, I cannot see how it is possible to explain them in words.

In treating of arts, there are important and significant distinctions concealed in words of vulgar use and appearance, which escape the observation of all except those who are skilled in the arts described; and therefore, notwithstanding the excellent translation and commentary of Meibomius, it is absolutely necessary to understand both Greek and *music*, in order to comprehend what the ancient writers on that subject have said; in which search, the *virtuosi* will find more help from their knowledge of the art than even of the language.

That the *emphatic impulse* of THESIS has been generally confounded with ACCENT by the moderns, has certainly been owing to their misunderstanding and misapplying what has been said by the ancients; which furnishes us with a convincing proof that the grammatical rules of *accentuation*, hitherto followed, are not only defective, but have led all those who strictly adhere to them, into an erroneous application of both ACCENT and QUANTITY; from which they are not likely to recover, till they acquire a clear understanding of the POIZE, as a peculiar and essential property, or accident *sui generis*. For, notwithstanding the resemblance in some cases, between FORCE and EMPHASIS, may contribute to make your l—p think them to be one and the same,

same, they certainly have nearly as much difference in their application and in their effects, as exists between and among our several senses. So, though seeing, feeling, tasting, &c. can all be reduced, under one general term, to sensation or perception; yet, as each of these five sensations have different objects and effects, they require distinguishing terms. I perceive by my eye, by my ear, by my finger, by my nose, and by my tongue; but is it not better to have the distinct powers of expression by saying, I see, hear, feel, smell, and taste? By my tongue, I may in the same instant perceive bitterness, sweetness, and heat; which, if I were denied those several distinguishing terms, I could never express so clearly and distinctly by the simple ver-
bality of perception or sensation: I might say, I had three different perceptions; but, for want of distinguishing terms, could not explain myself farther.

In language and music, a *sentence*, or *clause*, of twenty or more *cadences* may be *loud*, and the twenty next following *soft*; but at the same time, every *cadence*, both of *loud* and *soft*, must begin under the *heavy poize* (Δ), and end under the light ($\therefore$ or $\therefore$): from which it must appear, that FORCE and POIZE are two different perceptions; the one being, by necessity, uniformly periodical, and alternately *heavy* and *light* within each period; the other occurring casually or *ad libitum*, and continued or interrupted at the option of the speaker.

P. 176. †. “ We certainly have not the same perception of the
“ division of language into combinations of *long* and *short* syllables
“ (that is, *metrical feet*), as the ancients had; because having

“no such *rhythm* in our own language, our ears are not accustomed to it.”

In speaking, there is, or may be, a measure of time chosen in such just proportion to the subject and circumstance of the discourse, as that either faster or slower would seem to fall below perfection, in comparison with that just proportion; yet it is notorious, that various speakers, whose elocution, as to the *quantity* of syllables, either in the learned or the vulgar tongues, passes without censure, do all speak in very different measures of time; that is to say, some of them much faster, or twice as fast as others; but as every one of them preserves an *unity of measure* in his own discourse, so the syllables of each, singly speaking, will hold the proper proportions of *long* and *short*, each to each, among one another: though if we were to compare the *quantity* of any certain syllable pronounced by the slower speakers, with the *quantity* of the same syllable as uttered by the more rapid, we might, among the many, find this syllable of such various lengths as to suppose there was no such thing as *quantity* in the syllables of any language. But the relative proportional *quantities* of syllables, in both learned and vulgar languages, are as fixed and certain as the *steps* of a *minuet*, or any other regular dance, wherein, whether the *agoge* or *DRIFT* be faster or slower, the proportional lengths, of each to each, must be preserved under the *impulse* of *rhythmical* CADENCES (see p. 119 to 121.).

P. 176. †. “That language may be divided into bars, as well
 “as music, you have shewn very evidently.—But I much
 “doubt, whether any man, that is not a musician, can be made
 “to

“to perceive it; the consequence of which is, *that it will be of no use.*”

I think, the hardness of this decision, “*that it will be of no use,*” might be softened by adding the words, “to (the *amoufoi*) those that do not understand music.” For why need an art be cried down, because some people do not understand another art on which it depends? With the same justice it may be said, “The invention of letters is of no use, because some people have never learned to read.” Quintilian says, “Grammar cannot be perfect without music, as it must treat of *metres* and *rythmus* (b).” And therefore, as I have endeavoured to shew, that our language has precisely every one of the *rhythmical*, *metrical*, and *accentual* accidents attributed to the learned languages, I should hope, that Quintilian’s opinion will have some weight here; and that the learned who happen to be *amoufoi*, and consequently not competent judges of the facts, will think it just to stand neuter, when this question comes to the vote, if their taste and native ear for music does not incline them to be of our side.

P. 177. ||. “Whether a speech composed in such a way as not to be capable of a division into bars, will not offend the ear as much as music so composed?”

Neither music nor speech can be so composed as not to be capable of a division into bars; but a bad musician, or a bad speaker, may pronounce so as to keep no certain measure. And

(b) Institut. Orat. lib. I. c. 4. De Grammatica. Tum nec citra musicen grammatica potest esse perfecta, cum ei de metris rhythmisque dicendum sit.

a speech written down by the help of our notes, according to the bad manner of such a speaker, would appear to be divided *unrhythmically*; that is, by no equality of METRES or CADENCES. Even poets of great character sometimes write lines that, without great management of the reader, appear to be not divisible by *bars* or CADENCES of equal measure; but, by our rules, the worst can be reduced to METRICAL CADENCES and RHYTHMUS. (See the examples from the first book of Paradise Lost, p. 159.)

The syllabic articulations of speech are distinctly formed by the change of our organs, in expressing the several *literal sounds* of language: but the different *meanings* of *words*, formed by the same, or nearly the same, literal sounds and syllables, are distinguished by ACCENT, QUANTITY, and POIZE.

The POIZE being divided alternately into *heavy* Δ and *light* $\therefore$, and the *heavy* Δ , or *emphatic*, occurring uniformly, during the whole continuance of the same measure, at equi-distant periods, answers the same end between a speaker and his audience, as beating time does among musicians. For in whatsoever measure the speaker delivers himself, still the *agoghe*, the *emphatic impulse* of the POIZE, will keep both him and his audience in time together, and compel him to preserve the just *metrical proportions* of *quantity* in his *cadences*, according to *his* habitual dialect or tone.

Δ

For example:

Suppose two persons of the same habitual dialect or tone, differing only in velocity; the one quicker, the other slower; If the first should speak a sentence in the proportion of *six times*, or *six quavers*, in each CADENCE, allowing *one time* or *quaver* to the

the *shortest syllable*; and the other should repeat the same words in the proportion of *twelve times*, or *six crotchets* in each CADENCE, that is, allowing *two times*, or *one crotchet*, to the *shortest syllables*: it is evident, these two speakers would separately preserve the same ratio or proportion in the lengths of their syllables, each to each; so that, in that respect, the words would carry the same meaning, though the first speaker would pronounce twice as quick as the last; for the first would utter two CADENCES in the same space of time that the second would pronounce only one. As thus, the proportions marked in numbers:

First speaker, in cadences of six times.

3.	1.	2.	3.	1.	2.	4.	2.	4.	2.	2.	2.	3.	1.	2.
Y.		Y.	Y.		Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.
Light as the lightening glimpse, they ran, they flew.														
Δ	..	..	Δ	..	..	Δ	..	Δ	..	Δ	..	Δ	..	Δ

Second speaker, in cadences of twelve times.

6.	2.	4.	6.	2.	4.	8.	4.	8.	4.	4.	4.	4.	6.	2.	4.
Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.	Y.
Light as the lightening glimpse, they ran, they flew.															
Δ	..	..	Δ	..	..	Δ	..	Δ	..	Δ	..	Δ	..	Δ	..

But if the same words were uttered in the following manner by a third person, where, by the inequality of the *metres* or CADENCES, the RHYTHMUS is quite destroyed, and the POIZE misplaced,

False

False cadences, or metres, of unequal time.

1.	4. 8.	4. 8. 8.	4. 8.	4. 2. 4. 4.	4. 4. 4.
	○ □	○ □ □	— □	— Y — ○	○ — ○
	Light as the	lightening	glimpse,	they ran,	they flew.
	△	△ △ △	△	△ △ △	△ △ △

we should perceive the language so altered, as that it would scarce seem to be the same; it would be ridiculous or disagreeable, like the most uncouth mixture of different provincial manners; and the dislocated order of the POIZE (if any one could pronounce so) would give pain to an audience.

People who stutter, pronounce partly in this latter manner; but it is notorious, when such persons sing, they never hesitate or stutter; whence it may be supposed, the most easy and effectual method of curing them, would be to accustom them to beat time to their reading and common discourse, by which means they might learn to speak in just time to the proper measure of their words and phrases. For it should seem, the cause of their hesitation and stuttering arises from some inaptitude to fall in immediately with the *rhythmical pulsation* or *poize* befitting their words; but which, in singing, they are enabled to do, by the additional influence of the *diastematic melody*, wherein the CADENCES are more certainly pointed out, than even in poetry, or any language without additional music.

P. 177. ** “I must own myself fully convinced, that the
“pauses make an essential part of the rhythm of speech, and
“that if a man stops——too long or too short, &c.”

As

As your I—p is convinced of the necessity of measured pauses, you will easily conceive, that neither syllables nor pauses can be measured or duly proportioned without a certain uniform pulsation, either actual or in the mind; and this brings us to the necessity of the division by CADENCES or bars, the beginning of each CADENCE being marked almost as sensibly by the Δ heavy POIZE, as if the measure was beaten by the hand or foot.

P. 178. †† “The modern Greeks have lost these tones, and in place of *acute* and *grave* have substituted *loud* and *soft*; for they constantly found every syllable *loud* which is marked in the Greek books, with an *acute accent*, &c.”

Allow me here to put my terms of *heavy* and *light*, in the room of your I—p's words *loud* and *soft*; and then we shall agree, that the modern Greeks, misunderstanding what their ancestors meant by THESIS and ARSIS, and misled by the grammarians and commentators of the barbarous middle ages, are now in the same error with ourselves, by not considering that “the POIZE of syllables is the most determined accident in language” (p. 144.), though all nations must feel it, and by not making a

proper distinction between that and ACCENT.

∴ Δ ∴ Δ ∴ Δ ∴

P. 178. †† “Wherein (does) the difference consist betwixt the tone of passion and the musical tones of *acute* and *grave*?”

The tones of passion are distinguished by a greater extent of the voice both into the *acute* and the *grave*, and by making the *antithesis*, or diversity between the two, more remarkable. Also

by

by increasing the *forte*, and making contrasts occasionally between the *forte* and *piano*; and by giving an extraordinary energy or *emphasis*, and blending the *forte* now and then with the *heavy poize*; and lastly, by sudden and desultory changes of the measure and of its modes; that is, from *fast* to *slow*, and *vice versa*; and from *common* to *triple*, and *vice versa*.

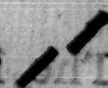
P. 178. |||| “ One man will sing a tune so as to touch the heart;——another——without any expression.”

A great deal of this difference lies in the tone of voice, but a great deal more belongs to art, which comes under the head of taste, and is done by adding *insinuating graces* (see p. 145.) and by the discreet use of the *staccato* and *softenuto*, the *piano* and *forte*, the *swell* and *dying away*.

P. 179. *** “ Whether——the Greek *acute accent* did (or “ did) not rise at once upon the *acuted syllable*, but was rising “ gradually upon the preceding syllables, &c.”

This depended generally on the subject, attendant circumstances, or the humour of the speaker, and sometimes, I conceive, on particular words; for so it is in our language. A review of the several examples which I have given will shew, that the *accent* rises or falls, sometimes at once, and at other times gradually.

And let it be remembered, as it is said in p. 30, “ that “ drawing the *accents* simply over the syllables, without the *five* “ *musical parallel* lines, but with some regard to higher or lower “ by position of the marks, was so certain a guide, &c.”—
I say,

I say, let it be remembered, that in the several examples, where the *accents* are drawn some higher or lower than others, as  it means to shew, that the second *acute* continued ascending gradually higher than the first; and if thus,  it means to shew, that the second *acute* did not begin from so low a tone as the first, but surpassed it in going higher. The same observations, being reversed, will apply to the *grave*, as  or ; a little attention will make this familiar, especially as great accuracy is not absolutely necessary in the dawn of this art, for we are allowed a great latitude in the pitch and extent of our *accents*.

THE END.

I say, let it be remembered, that in the several examples, where

The Reader is requested to correct the following Errors with the Pen.

Page, Line.

- xv. 4. from the bottom, for Epamininondas read Epaminondas
- 97 6. from the bottom, for but read for
10. 11. from the top, for Thrax. read Thrax,
- 23 14. for number read numbers
- 29 11. for $\left| \frac{3}{4} \right|$ read $\left| \frac{2}{4} \right|$
- 49 1. for the marks read the other marks
5. for To be! or not to be? &c. read To be! or not to be? that
43. 1. for def- read def-
3. for he him read he him
6. for $\left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right|$ read $\left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right| \left| \begin{array}{c} \Upsilon \\ \Upsilon \end{array} \right|$
70. last but one, for rhythmus read metres
75. 4. for or read and
88. 4. for viz. heavy and light which govern read viz. the poize of heavy and light which governs
109. 11. for (the same as § 7. ||.) read § 15. (the same as § 7. ||.)
114. 9. for parts; read parts, THE
16. for odd number three read odd number three,
17. for (OF MEASURE) read (OF MEASURE);
126. 4. from the bottom, for ra ta pa ta read ra ta pa ta
141. 6. for spe ci fic, dactyl. read spe ci fic, cretic.
147. 6. from the bottom, for (p. 23. 29. 30.) read (23. 29. 32.)
175. 2. for undestand read understand

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